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This index to materials received by the Department of the Interior in late 1967 and early 1968 contains 838 abstracts of technical articles, books, conference proceedings, directories, documents, reports, speeches, yearbooks, and bibliographies of outdoor recreation literature. Materials are arranged under 5 subject categories: (1) outdoor recreation resources; (2) administration of resources and programs; (3) recreation users, demands, and values; (4) research; and (5) history and philosophy. Cited materials are cross-referenced by subject, author, and geographic index. Appendices include listings of the indexed materials by type of publication. Related documents are ED 022 592 and ED 022 593. (TL)

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INDEX TO SELECTED OUTDOOR RECREATION LITERATURE

Citation Item Numbers 70848-71686 (1967)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Volume III

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PREFACE

This third compilation of abstracts of technical articles, books, conference proceedings, directories, documents, reports, speeches, yearbooks, and bibliographies of outdoor recreation literature covers materials noted by the Interior Department late in 1967, and in early 1968. Most items were published in 1967; a few, however, have a 1966 publication date.

Volume III of the INDEX TO SELECTED OUTDOOR RECREATION LITERATURE has been compiled by the Bureau of Outdoor Recreation in collaboration with the Department of the Interior Library. Abstracts of Canadian and United Kingdom articles were made possible through the continuing cooperation of Canada's Department of Indian Affairs and Northern Development.

Arrangement is by five broad categories into which outdoor recreation literature may be classified. These appear in the Table of Contents. Within each category, the citations are arranged alphabetically by author, or, if the work is anonymous, by title.

Each citation bears an item number beginning with the number 70849. The first digit, 7, represents the year, 1967. The remaining four digits indcate citation item numbers. There are 838 citations; the numbers range from 70848 to 71686.

Sources Listed

The literature cited is listed by form in the appendices. Appendix I contains the list of periodicals abstracted for this volume. Appendix II contains publications other than periodicals also abstracted. These included books, documents, technical reports, conference proceedings, speeches, yearbooks, bibliographies, and directories.

How to Use

The abstracts may be located by consulting the indexes printed in the sections which follow the last citation. They provide several points of access to the material. There are three separate indexes:

1. Subject Index. Approximately 550 key words refer to citations by item numbers. Each citation may have as few as two, or as many as eighteen, descriptor or key words. In this volume, the average number of key words per citation is seven.
2. Name Index. This contains authors, editors, corporate bodies, and persons responsible for or discussed in the articles, and all other proper names except place names, which appear in the Geographic Index.
3. Geographic Index. This refers to citations by countries, regions, States, counties, cities, rivers, as well as by proper names of units administered by Federal and State agencies, and miscellaneous geographic terms.

Suggested Changes

Readers are invited to send their comments and suggestions. Additional sources of technical and scientific writings on outdoor recreation subjects are welcomed.

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OUTDOOR RECREATION RESOURCES

70848 Allen, D.L. THE LIFE OF PRAIRIES AND PLAINS. New York, McGraw-Hill. 232p. 1967. Ref., maps, illus., photos.

This book traces the development of the primitive plant-animal community of the original grasslands of North America but especially deals with the ecology of the prairies and plains of the United States. The different types of grasses, animals, and birds are described and illustrated with brilliant color photographs. The history of man and his place in the ecosystem are treated. The appendix includes: grassland areas administered by the Department of the Interior; significance of scientific classification; the anatomy of a grass and clues for identifying grasses; techniques of building a grassland plant collection; a list of vanishing animals of the grasslands and a glossary of biological terms. QH541.5 P7A4

70849 Amos, W.H. THE LIFE OF THE POND. New York, McGraw-Hill. 232p. 1967. Ref., illus., photos.

This book, published in cooperation with The World Book Encyclopedia, presents the total ecology of the pond. Animals, fish, insects, mammals, plants, and seasonal changes are treated in detail and vividly illustrated. The interdependence and parasitism of organisms are discussed. Different kinds of ponds are explained. The appendix includes: (1) ponds in national parks and wildlife refuges; (2) what a fish sees; (3) a guide to common pond animals; (4) home-made ponds; (5) equipment for investigating ponds; (6) domesticating pond animals; (7) use of microscopes for exploring the pond world. Also included are a glossary and bibliography. QH541.5 F7A45

70850 Angier, B. Nature provides. NAT. WILDL. 5(4):23-27, June-July, 1967. Illus.

This article describes types of edible herbs, nuts and berries available in the wild. Many were known to the Indians and early settlers.

70851 Arno, S.F. The North Cascades. NAT. PARKS MAG. 41(237):4-9, June 1967. Photos.

A description of the North Cascades is given. This Alpine region's climate, flora and fauna combine to make it one of splendid scenic and scientific value. The peaks, largely granite, are 8,000 to 9,000 feet in altitude, and provide solid footing for mountaineers. This extensive mountain region, similar to the Alps of Europe, if made into a national park and wilderness area as proposed by the Administration, would offer trails for the backpacker, photographer, fisherman, hunter and anyone who enjoys nature at her scenic best. In any plan for the protection of this magnificent region there is the urgent problem of the development of mining. Extensive mining operations in any of these areas will destroy them.

70852 Atkinson, B. Grand Canyon. NATUR. HIST. 76(9):38-49, Nov. 1967. Photos.

The ecological, scientific and historical significance of the Grand

Canyon are briefly described, and photographs illustrate its aesthetic, visual and natural beauty. The article is critical of the exploitation of the Canyon through dams.

70853 Bachman, G.O: MINERAL APPRAISAL OF THE SALT CREEK AREA, BITTER LAKE NATIONAL WILDLIFE REFUGE, CHAVES COUNTY, NEW MEXICO. Washington, Govt. Print. Off. 10p. 1967. Ref., maps, tables. (U.S. Geological Survey. Bulletin 1260-A).

The bulletin, one of a series of studies related to wilderness, is a compilation of geologic information on the Salt Creek Area in the Bitter Lake National Wildlife Refuge, Chaves County, New Mexico. This area is under consideration for inclusion in the National Wilderness Preservation System. Maps point out location and geologic formations. Data are included on rock presence in the subsurface of Salt Creek Area.

70854 Bachman, G.O., Stotelmeyer, R.B. MINERAL APPRAISAL OF THE BOSQUE DEL APACHE NATIONAL WILDLIFE REFUGE, SOCORRO COUNTY, NEW MEXICO. Washington Govt. Print. Off. 9p. 1967. Ref., map. (U.S. Geological Survey. Bulletin 1260-B).

The bulletin, one of a series of studies related to wilderness, is a compilation of geologic information on the Bosque del Apache National Wildlife Refuge. Three units in the Refuge have been proposed as candidates for wilderness status under the National Wilderness Preservation System. The geology, location, geography, mineral potential, and economic appraisal are discussed; a geologic map of the Refuge is included.

70855 Block Island. HOLIDAY, 42(2): 74-75, Aug. 1967. Photo.

Block Island, twelve miles off the Rhode Island coast, is isolated, uncommercial and beautiful, with a mild climate. The Island's economy is based on commercial fishing and summer vacationers. A brief history is given.

70856 Breed, W.J. The Canyon and The River. NATUR. HIST. 76(9):50-51, Nov., 1967. Map, illus.

The article discusses the geology of the Grand Canyon. Particular attention is paid to the various types of rock formations found in the canyon and the fossils they contain. Theories relating to the formation of the canyon are presented.

70857 Brooks, M.G. THE LIFE OF THE MOUNTAINS. New York, McGraw-Hill. 232p. 1967. Ref., maps, illus., photos.

This book describes mountain life – its ecology, history, wildlife, and natural beauty – as found in mountain ranges of the United States. A large map in color shows all the major mountain ranges of the United States, and there is extensive use of drawings and color photographs. The appendix lists all national parks and national monuments which have mountains with descriptive data about each. In addition, the appendix provides the basics of back packing, a guide to common fossils, a glossary and an index. QH541.5 M65B7

70858 Brown, M.C. Sinking Creeks of Mt. Tupper. A remarkable groundwater system in Glacier National

Park, B.C. CAN. GEOGR. 11(1):49-52, 1967. Ref., maps, photos.

The sources of the water and the nature of the feeder system of Mount Tupper are investigated by a party from McMaster University. A normal surface drainage is suggested.

70859 Burch, J. Trails, Rio Camuy Cave. NAT. SPELEOL. SOC. BULL. 29(2):54-60, Apr. 1967. Photos.

In the early days of cave development, visitors had to crawl, scramble, slide and splash through the cave in a special costume. The trails were primitive; the ladders, handrails, and safety devices limited. Gradually better planning brought about such improvements as loop routes or two entrances to avoid retracing of steps. The recommendations for Rio Camuy Cave trails are reported here. Beginning with a high speed elevator at the entrance, descending all the way to the cave floor, the cave developer describes the foot trails, bridges, cantilevered trails, and cog railway to convey the visitor through the spectacular Rio Camuy Cave.

70860 Burrier, T. The wilds of Flaming Gorge. TRAIL. LIFE, 27(5): 62-63, 119-124, May 1967. Map, photos.

The Flaming Gorge National Recreation Area is described as a region of bright-colored river canyons, high rugged mountains, and sagebrush-covered benchlands which teem with wildlife as well as a wealth of other resources – timber, forage, water, minerals, and recreation.

70861 Canney, F.C., Lehmbeck, W.L., Williams, F.E. MINERAL RESOURCES OF THE PINE MOUNTAIN PRIMITIVE AREA, ARIZONA. Washington, Govt. Print. Off. 45p. 1967. Ref., maps, photos, tables. (U.S. Geological Survey. Bulletin 1230-J).

The report, one of a series of similar reports on primitive areas in Studies related to wilderness, evaluates the mineral potential of the area under consideration for wilderness status. Modifications of the boundary of the original Pine Mountain Primitive Area have been proposed. The area surveyed in this report is referred to as the Pine Mountain Primitive Area. Data are given on geochemical analyses of stream sediments, rocks, soils and other materials, and heavy mineral concentrates.

70862 Canyon Rims Recreation Area. WEST. GATE. 7(4):20-21, 60-63, Autumn 1967. Photos.

The Bureau of Land Management is opening some spectacular portions of the public domain for recreation use. Canyon Rims Recreation Area, adjacent to, but outside, the boundaries of Canyonlands National Park, is described.

70863 Carrington, R. GREAT NATIONAL PARKS. London, Weidenfeeld & Nicolson. 240p. 1967. Ref., map, photos.

The book presents the major national parks of the world and with accompanying text and photographs creates an impression of their natural resources and their historical background. The differences in definition of the term "national park" among the nations are explained. The development of the national park movement as an aspect of man's relationship with the environment and

conservation of nature is also discussed. The book is arranged according to zoogeographical realms and includes countries in that realm whose national parks are described.
S962 C37 1967

70864 Chamberlain, B.B. Cape Cod. NATUR. HIST. 76(5):24-33, May 1967. Map, illus., photos.

The history of the Cape Cod National Seashore, its constant geologic creation and destruction, and the abundance and variety of plant life are described in detail. The work of travelling glaciers and the resultant moraines are responsible for Cape Cod, Martha's Vineyard, Nantucket, and Long Island, New York. The undisturbed natural beauty of the sandy beaches and valleys of the Cape make the area attractive to fishing, bird watching and other recreative activities.

70865 Clement, O.A. Nebraska's man-made forest. NAT. PARKS MAG. 41(242):18-19, Nov. 1967. Map, photos.

A brief description is given of the origin of the Nebraska National Forest, a man-made forest in the Nebraska sandhill country.

70866 Crittenden, M.D., Jr., Wallace, C.A., Sheridan, M.J. MINERAL RESOURCES OF THE HIGH UINTAS PRIMITIVE AREA, UTAH. Wash., Govt. Print. Off. 27p. 1967. Ref., maps, photos, tables. (U.S. Geological Survey. Bulletin 1230-I).

The bulletin, one of a series of similar reports on primitive areas in Studies related to Wilderness, evaluates the mineral potential of the High Uintas Primitive Area under consideration for wilderness status. Some modifications of the boundary have been proposed.

70867 Cromie, T.S. Cleveland's emerald necklace. FORD TIMES, 60 (3):52-55, Mar. 1967. Photos.

Metropolitan parks which circle the city of Cleveland, Ohio, offer a wide variety of activity in every season.

70868 Crowder, D.F. MINERAL RESOURCES OF THE DEVIL CANYON–BEAR CANYON PRIMITIVE AREA, CALIFORNIA. Washington, Govt. Print. Off. 21p. 1967. Ref., maps, photos, tables. (U.S. Geological Survey. Bulletin 1230-G).

The bulletin, one of a series of similar reports of primitive areas in Studies related to Wilderness, includes accessibility, physical features, geology, mineral resources and evaluates the mineral potential of the area, which is under consideration for wilderness status. Modifications of the boundary have been proposed and the Forest Service has recommended the area be renamed the San Gabriel Wilderness if incorporated into the National Wilderness Preservation System.

70869 Delaney, J. Parker... a funtastic playland. DESERT, 30(11):15-17, Nov. 1967. Photos.

The Parker Dam area is a fine recreational spot. Almost all traveling in the region is done by water with dockside parking facilities. The small towns which surround the Dam have some of the flavor of the old West. Recently opened Buckskin Mountain State Park with its interpretive center has become one of the chief tourist attractions.

70870 Dietz, L. Okefenokee. FIELD STREAM, 71(12):60-61, 165-167, 169, 171-173, Apr. 1967. Illus.

The great Okefenokee Swamp of southeastern Georgia is an enchanting land. Some of the area remains to be explored. The 400,000-acre swamp supports more than 200 species of birds, 40 animal species, 34 varieties of fish, and 100 varieties of reptiles and amphibians. Botanists are still finding new aquatic plants. Since 1937, the swamp has been a National Wildlife Refuge.

70871 Dodge, F.C.W., Fillo, P.V. MINERAL RESOURCES OF THE DESOLATION PRIMITIVE AREA OF THE SIERRA NEVADA, CALIFORNIA. Washington, Govt. Print. Off. 27p. 1967. Ref., maps, photos, tables. (U.S. Geological Survey. Bulletin 1261-A).

The bulletin, one of a series of similar reports on primitive areas as they relate to a National Wilderness Preservation System, discusses the location, general features, the geology, mineral resources, and economic appraisal of Desolation Valley Primitive Area in El Dorado County, near the southwestern shore of Lake Tahoe. Analytic data of the area and atomic absorption gold analyses of samples from the Josie claims are given.

70872 Dodge, N.N. The new Guadalupe Mountains National Park. NAT. PARKS MAG. 41(233):4-7, Feb. 1967. Map, photos.

A mountain wilderness in a desert setting is one description of the 77,500-acre area of scenic West Texas highlands recently to become the Guadalupe Mountains National Park. The geological, botanical, and archaeological resources of the recent addition to the National Park System are described.

70873 Dodge, N.N. 100 ROADSIDE WILDFLOWERS OF SOUTHWEST UPLANDS IN NATURAL COLOR. Globe, Ariz., Southwest Monuments Association. 61p. 1967. Ref., photos. (Southwestern Monuments Association. Popular series, no. 12).

This book is a description and pictorial catalog of wildflowers that grow in the Southwest's uplands, 4,500-7,500 feet above sea level. One hundred wildflowers are identified by their common name or names and the scientific Latin ones. The origin, blooming dates, and present locale for each are given.

70874 Dodge, R.O. New chapter for a storied land. MICH. CONSERV. 36 (4):2-7, July-Aug. 1967. Map, photos.

Description and history of Pictured Rocks National Lakeshore on Lake Superior are given. The Park Service is developing a master plan for the 67,000-acre park which is divided into primary and buffer zones.

70875 Done, O. Trailing Route 66. TRAIL. LIFE, 27(8):58-59, 93-94, Aug. 1967. Photos.

U.S. Route 66, a modern interstate highway, passes through seven States.

Scenic and recreational areas between Los Angeles and Chicago along the highway are described.

70876 A drive through the ages. WEST. GATE. 7(4):17-19, 72-73, Autumn 1967. Illus., photos.

The Sheep Creek Geological area, a unique region formed some 400,000,000 years ago lies within Ashley National Forest. Geological areas are relatively new, but the Forest Service provides 3 visitor information centers to show classic geological processes or phenomena.

70877 Eckert, A.W. WILD SEASON. Boston, Little, Brown. 244p. 1967. Illus.

The author describes the life and death of mammals, reptiles, amphibians and other wildlife in the natural environs of Oak Lake, a glacial lake in southern Wisconsin during the month of May. PZ4 E19

70878 Edwards, W.M. Lake Powell: waterway to desert wonders. NAT. GEOGRAPH. 132(1):44-75, July 1967. Map, photos.

This article describes the geological formations and history of the Lake Powell area. A few years ago only about a hundred visitors came to this Glen Canyon region. In 1966 Lake Powell, a reservoir created by the Glen Canyon Dam, attracted more than 360,000 visitors. Some oldsters preferred the natural beauty of the area before the reservoir was created.

70879 Federal Writers' Project. California. CALIFORNIA. A GUIDE TO THE GOLDEN STATE. New revised edition. New York, Hastings House. 733p. 1967. Ref., maps, photos.

This comprehensive reference book is divided into four parts. The preliminary pages contain a guide to recreation; places to visit, sports, outdoor recreation. Hunting, fishing and driving regulations are listed in detail with fees and licenses required. There are several pages of information on winter sports in California, a digest from Winter Sports Guide of the Travel & Recreation Dept., California State Chamber of Commerce. Part I gives general information about California, its history, industry, agriculture, transportation, education, cultural enterprises, and people. Part II pertains to major cities of the State and gives points of interest as well as statistical and general information. Part III gives fourteen driving tours throughout the State. Information on highways, suggested stopping points, and towns and cities enroute are provided. Tours of Death Valley National Monument, Yosemite, Sequoia and Kings Canyon National Parks are also included. Part IV contains Appendices with a chronology, a list of books about California, and maps. F859.3 F4 1967

70880 Finnell, T.L., Bowles, C.G., Soule, J.H. MINERAL RESOURCE OF THE MOUNT BALDY PRIMITIVE AREA, ARIZONA. Washington, Govt. Print. Off. 14p. 1967. Ref., maps, tables. (U.S. Geological Survey. Bulletin 1230-H).

This bulletin, one of a series of similar reports on primitive areas in Studies related to Wilderness, gives an evaluation of the mineral potential of part of the White Mountains. It includes an economic appraisal.

70881 Fobes, C.B. Trail profiles on Mt. Washington. APPALACHIA, 36(4):671-675, Dec. 15, 1967. Illus.

This article shows profiles of five trails to the summit of Mt. Washington in New Hampshire. The profiles are on U.S. Geological Survey topographical maps and a descriptive paragraph accompanies each profile.

70882 Following the Santa Monicas as they march out to sea. SUNSET, 138(4):78-85, Apr. 1967. Map, photos.

The report deals with the seaward part of the Santa Monica range whose top rises above the Pacific to form the northern four of the eight Channel Islands. The natural features and scenic points of interest described include Anacapa, Santa Cruz, Santa Rosa, and San Miguel. Information is given on boat travel through the area.

70883 Freeman, B.O. Along Mississippi lakes and streams. A trip ashore. MISS. GAME FISH, 27(4):6-7, July-Aug. 1967. Photos.

Much of the Natchez Trace has changed little since the days of the pioneers. Natchez Trace is not only a study in the history of man but also a study in the history of nature. Discoveries that can be made along this wonderland of nature and history are described in this article.

70884 Giese, G.L., Barr, J.W. THE HUDSON RIVER ESTUARY. A PRELIMINARY INVESTIGATION OF FLOW AND WATER-QUALITY CHARACTERISTICS. Albany, N.Y., Conservation Dept. 39p. 1967. Ref., maps, illus., tables. (New York [State] Water Resources Commission. Bulletin 61).

The report describes the flow of water in the Hudson River estuary, the relation of flow to salinity; and evaluates the adequacy of this knowledge as a guide for future development of the estuary as a water resource. Data on the chemical quality of water in the estuary, the Hudson River drainage basin, and other information are furnished.

70885 Giles, C.H. Earthquake lake. NAT. PARKS MAG. 41(242):7, Nov. 1967. Photo.

In the wake of an 1811 earthquake, Reelfoot Lake in Tennessee appeared. Located about a hundred miles north of Memphis and about ten miles east of the Mississippi River, Reelfoot has been designated an outstanding American natural history area in the National Registry of Natural History Landmarks program of the National Park Service. Part of this large earthquake lake lies within the 9,271–acre Reelfoot Lake National Wildlife Refuge.

70886 Goodman, J. The other side of the Tetons. FORD TIMES, 60(7): 14-18, July 1967. Map, photos.

The western side of the Teton range in Idaho has much beauty and is not as congested as the eastern side. A description is given of the routes, the surrounding areas, and the available activities on this side of the Range, which is near both Grand Teton and Yellowstone National Parks.

70887 Hafstad, G.E. Why city folks need trees. AMER. FOR. 73(8):18-21, Aug. 1967. Photos.

Trees in a city have functional as well as aesthetic value.

70888 Hagood, A. THIS IS ZION. Salt Lake City, Zion Natural History Association. 73p. 1967. Ref., photos.

This booklet contains two parts. The first describes Zion's beauty and how it was discovered by man. The second presents the geological story of the layered rocks.
F832 Z8H2

70889 Harrison, G.H. The valley of the condors. NAT. WILDL. 5(6):4-9, Oct.-Nov. 1967. Map, photos.

The managing editor of National Wildlife accompanied by scientists and staff of the Bureau of Sport Fisheries and Wildlife travel to the Sespe Sanctuary in Los Padres National Forest to observe the few remaining California condors. Only two sanctuaries, Sespe and nearby Sisquoc, are refuges for the rapidly disappearing carrion birds. The habits of these birds and their future are discussed. Oil exploration and drilling in the Sespe area, the low breeding potential and reluctance to nest when disturbed, are factors which influence the condor's future.

70890 Heintzelman, D.S. Something strange in the osprey's world. PA. GAME NEWS, 38(7):9-13, July 1967. Ref., photos.

The author speculates about the decrease of total number of ospreys from many nesting areas in contrast to their increase in number of these birds in migrations.

70891 Hout, J., Lensink, C.J. Clarence Rhode National Wildlife Range. ALASKA SPORTS. 33(7):33-35, July 1967. Photos.

The Clarence Rhode National Wildlife Range in Alaska is an important nesting area for many waterfowl and the home of many wildlife species. The Range offers the bird student an excellent opportunity to study many birds on their nesting grounds.

70892 Huser, L.C. Trails of the Grand Teton. NAT. PARKS MAG. 41(236):10-14, May 1967. Map, photos.

Trails maintained in the back country of Grand Teton National Park are described: hiking and riding trails; natural game trails; water trails of lakes and streams; and secondary trails maintained for outdoorsmen's use. The types of back country traversed by these trails include: the valley; the canyon country; the east-facing mountain canyons; and the mountain country on the west side of Teton Peaks. The geological formations and wildlife of the area are mentioned.

70893 Illinois. Division of Fisheries. ILLINOIS FISHING GUIDE. Revised ed. Springfield, Ill. 48p. 1967. Maps, photos., tables. (Fishery Bulletin No. 1).

This directory contains listings of public and private fishing areas by county with facilities and activities available. Illustrations and detailed descriptions of fish species common to Illinois waters are given. SH11 1325 No. 1 Rev. 1967

70894 International Union of Forestry Research Organizations. PAPERS, 14th Congress. Forest Recreation and Wildlife. Munich, DVFFA. V.7, Section 26, 1967, Ref., maps, photos.

Individual papers have been abstracted and appear under the author's name. For articles in foreign languages only the titles have been translated.

70895 Ireland, S.H. Where snow is old-fashioned. FORD TIMES, 60(7): 12-13, July 1967. Photos.

Ski Villa is a new recreation center in southern California where skiing is available all year around through the use of plastic bristles in the form of tile. Instructors declare the bristles are smoother and really more consistent than snow.

70896 Ives, R.L. Glacial deposits, Middle Park, Colorado. EXPLOR. J. 45(3):206-213, Sept. 1967. Map, photos.

A need has arisen to preserve archaeological, botanical, geological and other scientific evidence due to loss as a result of irrigation dam construction. The Colorado-Big Thompson Transmountain Diversion Project is discussed as an example. The findings are described and pictorial evidence is presented.

70897 Jeffers, J. Petrified forest. ARIZ. HIGHW. 43(6):2-31, June 1967. Photos.

An area of Arizona known as the "Petrified Forest" is set aside by the National Park Service to preserve and interpret an outstanding deposit of petrified wood, Indian ruins, petroglyphs and a section of the Painted Desert. A tour through the Park and its various points of interest are described. The unique geological features and history of the area are exhibited in museums and the outdoor locations themselves. Stories with local color are told.

70898 Jensen, F. Capitol Reef National Monument. WEST. GATE. 7(2): 18-23, 52, Spring 1967. Map, photos.

Capitol Reef National Monument contains formations of large sandstone reefs which cover an area 56 square miles. It includes the Fremont River Canyon, the Capitol Gorge, and the 1000-foot high escarpments of the Waterpocket Fold.

70899 Jensen, M. Wyoming's wheel of mystery. A rock-strewn landscape attracts national forest visitors. BET. CAMP. 8(4):26-27, Apr. 1967. Photo.

A description is given of a stone structure known as the medicine wheel, on top of 10,000-foot Medicine Mountain in the Bighorn National Forest. It was first discovered around 1900 and is now protected by public land laws to preserve the "wheel" for archaeologists to study. Many theories concerning its origin have been promulgated.

70900 Johnson, D. Montana's awesome earthquake area. FORD TIMES, 60(7):32-36, July 1967. Photos.

On August 17, 1959, one of the worst earthquakes ever recorded in the U.S. occurred in the Madison River Canyon, Montana. Today the Earthquake Area attracts many tourists with its visitor's center, educational exhibits, lectures, and campgrounds built by the Forest Service. Private resorts and camps are also available.

70901 Johnson, E. Prehistory in our State parks. CONSERV. VOLUNT. 30(173):13-17, May-June 1967. Photos.

Lake Mille Lacs, the Cannon River junction with the Mississippi above Red Wing, and the Big Stone Lake Traverse Area are some of the many areas in Minnesota which contain almost undisturbed prehistoric archeological sites of past cultures. The three major sites in Mille Lac-Kathio State Park which have been partially excavated and contain evidence of camp and village locations, specialized hunting and fishing areas, food resource areas, and occupation areas, are: Petaga Point, the Leland R. Cooper Site, and the Kathio School Site. A regional archaeological natural history museum to interpret the prehistory of East-Central Minnesota may become a major attraction of the Park.

70902 Johnson, G.M. The Badlands and Teddy's Park. LIV. WILDERN. 31(96/97):20-27, Spring-Summer 1967. Maps, photos.

This article is a description of the geology, wildlife, and facilities of the Theodore Roosevelt National Memorial Park, part of which is recommended for wilderness status. Emphasis is placed on the history of the park and its relationship to. President Theodore Roosevelt. Maps show the wilderness areas proposed by the North Dakota Wilderness Committee and cooperating citizen groups.

70903 Katula, S., Ell, L. Looping the Loup. NEBRASKALAND, 45(6):30-39, June 1967. Photos.

The Loup River and its tributaries meander through more than 970 miles of rolling sand hills and fertile valleys – a country rich in history and natural beauty. Features of the area which provide parks, fishing, camping and boating, outdoor spectator events, and visits to old mines, forts and other historic sites are described.

70904 Keifer, R. Head for the Sun Country – to ski! FORD TIMES, 60(1):41-44, Jan. 1967. Photos.

The skiing opportunities of the Southwest, particularly New Mexico, are enumerated.

70905 Klingel, G.C. THE BAY. Hatboro, Pa. 278p. 1967. Illus.

Originally published in 1951, The Bay has been revised slightly to reflect the inevitable changes which the years have brought to the Chesapeake and to the author's perspective. The book is not a technical nor scientific treatise but rather a report on the Chesapeake as a natural phenomenon as observed by the author, a naturalist. Life above and below the waters of the Bay is described. QH104.5 C45K 1967

70906 Koteff, C. SUMMARY REPORT ON THE GEOLOGY AND MINERAL RESOURCES OF THE MONOMOY NATIONAL WILDLIFE REFUGE, BARNSTABLE COUNTY, MASSACHUSETTS. Washington, Govt. Print. Off. 4p. 1967. Ref., map. (U.S. Geological Survey. Bulletin 1260-D).

The report, one of a series of studies related to wilderness areas, is a compilation of geologic information and discusses location and access to Monomoy National Refuge, Barnstable County, Massachusetts. A map of the Refuge is included.

70907 Laird, E.M., ed. CONSERVATION AND WILDLIFE: BIBLIOGRAPHY I. Coconut Grove, Fla., Field Research Projects. 157p. 1967. (Natural Area Studies No. 3).

This is a bibliography of recent literature (1960 – 1966) on the conservation of wildlife. References have been taken from journals of the U.S., Canada, Australia, New Zealand, Asia, Africa, most of the countries of Europe, including the Soviet bloc, and a small number of journals from South America. The titles of some books have also been included. A subject arrangement by which articles of a general nature precede those which deal with specific families and orders of animals has been followed. Z7994 G3L18 No. 1

70908 Lambert, D. Alaska's Glacier Bay National Monument. NAT. PARKS MAG. 41(240):4-9, Sept. 1967. Map, photos.

Glacier Bay National Monument, one of the largest units of the National Park System, is comprised of innumerable glaciers, mountains, snowfields, rivers, lakes, and bays. In 1966 the National Advisory Board on Parks recommended national park status for the Monument. The National Park Service has expressed interest in most of the Monument as a wilderness area. In addition to its contribution to science, Glacier Bay offers wilderness campsites (no facilities provided), regular boat cruises and nature trails. Glacier Bay Lodge provides public accommodations and services for day-long sightseeing tours.

70909 LeGrande, P. Callaway Gardens. AMER. HORT. MAG. 46(4):224-229, Oct. 1967. Photos.

The Callaway Gardens located at Pine Mountain, Georgia, offer a fine recreational opportunity for the people of the area. The Gardens contain native plants of the Southern Appalachian and numerous trails on which plants are labeled. The 25,000-acre predominantly wooded area is maintained on the receipts of visitors and is devoted to recreation, education, and inspiration. Recreation facilities now included are sparkling lakes, a man-made sand beach, fishing in the 175-acre Mountain Creek Lake, golfing, picnicking, horseback riding, tennis, and Club House dining.

70910 Leydet, F. Down the Colorado. HOLIDAY, 41(6):50-55, 118-119. June 1967. Photos.

A brief article with numerous colored photographs describes a nineteen-day boat trip down the Colorado

River through the Grand Canyon. The possible construction of two hydroelectric dams, replacing the wild-running water with commercialized lakes, is deplored.

70911 Long, R.M. Ski center uplifts declining economy. AMER. COUNT. GOVERN. 32(11):48-49, Nov. 1967. Photo.

Jo Daviess County, Illinois was, before the introduction of a ski resort in 1959, a small farming community. Now thousands of visitors and millions of dollars annually are pouring into the community. Local planning officials and area leaders see potential recreation development on a large scale as means to increase the region's economic base.

70912 McCoy, D.B. Mentor Marsh. NAT. PARKS MAG. 41(238):12-13, July 1967. Photos.

The article gives a brief description of the terrain, the plant and animal life, the vegetation and the legends of Mentor Marsh, in northeastern Ohio. The area has been designated as a registered natural landmark by the Dept. of the Interior.

70913 Martin, J. A gem in the Cascades. OUTDOORS, 9(1):29-33, June 1967. Photos.

Shasta Reservoir on the Sacramento River, mainspring of California's Central Valley Project, provides water for recreation as well as electric power and irrigation.

70914 Marx, W. THE FRAIL OCEAN. N.Y., Coward-McCann. 248p. 1967. Ref., photos.

Man's progress, with its by-products of waste and destruction of natural resources, can mean death to the ocean. Pollution affects all marine life and business of beach-side resorts. Beaches are very resilient and can endure hurricanes and summer crowds of recreationists, but they cannot withstand tampering with the natural forces that sustain them. The cost of beach erosion control is high. The underwater forest is vital to marine ecology. The consumption of fish from polluted waters can seriously affect man's health. With proper controls the ocean can be of beneficial use for waste disposal. Unlike land, a given area of water has a number of recreation uses. The Chicago lakefront is cited as an example of waterfront restoration. If these areas are properly maintained, cities can have prime water recreation. In contrast, San Francisco and its surrounding communities are destroying the natural beauty and resources provided by the Bay. Other aspects of the oceans' resources are emphasized. GC1018 M3

70915 Mathews, F.S. FIELD BOOK OF WILD BIRDS AND THEIR MUSIC. N.Y., Dover Publications. 325p. 1967. Illus.

This book describes in detail the songs of 127 species of birds and represents each by musical scores. The primary interest of the author is in the music of bird songs. This edition is an abridged republication of the 1921 revised and enlarged edition of G.P. Putnam's Sons. In the foreword to the current Dover edition, D.J. Borror states that although the song descriptions may be inadequate by modern standards, they are still of considerable interest to bird lovers, musicians, and ornithologists. A musical key and a glossary of musical terms commonly used in the notations are included. QL 676 M35 1967

70916 Mead, H. The Apostle Islands. WIS. TALES TRAILS, 8(2):22-23, Summer 1967. Photos.

The Apostle Islands, a chain of islands in Lake Superior, have been proposed for a national lakeshore. This article describes the islands and sketches their history.

70917 Mellinger, M.B. High horizons. NAT. PARKS MAG. 41(237):10-11, June 1967. Photos.

Indigenous flora along the ridges and trails of the Great Smoky Mountains are described.

70918 Minard, J.P. SUMMARY REPORT ON THE GEOLOGY AND MINERAL RESOURCES OF THE GREAT SWAMP NATIONAL WILDLIFE REFUGE, NEW JERSEY. Washington, Govt. Print. Off. 14p. 1967. Ref., maps, photos, tables. (U.S. Geological Survey. Bulletin 1260-E).

The report, one of a series of studies related to wilderness areas, is a compilation of geologic information which discusses the location, physiography and history, geology, and the resources of the Great Swamp National Wildlife Refuge, New Jersey. The total acreage of the Refuge is about 6,000 acres; of which a 2,400-acre roadless island, The M. Hartley Dodge Unit, has been proposed for inclusion in the National Wilderness Preservation System. An index map with a geologic map, photographs of the Refuge and typical swamp vegetation are included.

70919 Moore, T. MT. McKINLEY. College, Alaska, Univ. of Alaska Press. 202p. 1967. Ref., maps, photos.

The book traces the early explorations of Mt. McKinley, Alaska and deals with the controversy over Dr. Frederick A. Cook's claim of ascent of Mt. McKinley in 1906, and the North Pole in 1908. Primary source material is included as well as a glossary of mountaineering terms. F912 M2M6

70920 Muench, J. Oldest living things on earth. NEV. HIGHW. PARKS, 27(3):18-25, Fall 1967. Photos.

Within the past decade it has been discovered that bristlecone pine trees have the distinction of being the oldest of all extant species. Some of these pines, which started as seedlings 26 centuries before Christ, are still growing in the White Mountains on the Nevada-California border. They are found in scattered small groves above 7,500 feet and in desolate remote areas. A number of these ancient trees are found growing along the Snake Range in eastern Nevada. Because of this unique feature, the area may eventually be designated a national park.

70921 Newberry, T. The seashore. Wilderness between the tides. SIERRA CLUB BULL. 52(3):7-9, Mar. 1967. Illus.

A biology professor at the University of California, Santa Cruz, explains the uniqueness and diversity of life found in the intertidal region of the seashore. This belt of land is easily destroyed by construction, pollution, and thoughtless toleration of man-made forces that upset the ecological balance of nature.

70922 Non-technical peaks in the Tetons. SUMMIT, 13(5):2-7, June 1967. Map, photos.

Recreation opportunities in Grand Teton National Park are described. Peaks which may be ascended third class are given with their elevations and preferred routes.

70923 Oldendorph, O.F. California's Anza-Borrego Desert State Park: A 488,000-acre public preserve of pastel colors, spiny plants, and timid animal life. NAT. PARKS MAG. 41(243):4-9, Dec. 1967. Map, photos.

The author provides photographs and maps of Anza-Borrego Desert State Park in southern California and discusses its plant and animal life, the desert landscape, the climate, the primitive areas, the camping possibilities and as background the history of the desert.

70924 Oldendorph, O.F. "Ground afire." NAT. PARKS MAG. 41(238):4-9, July 1967. Map, photos.

The topography, climate, and mineral resources are integral elements in the history of Death Valley Monument. Geological and human events in the history of this desert area, now a national monument unit of the Park Service, are related.

70925 Oliver, J. Whither Little River? SUBURB. LIFE, 37(6):30-31, July-Aug. 1967. Photos.

New Jersey's Whippany River offers potential for development of outdoor recreation facilities in conjunction with historical preservation and interpretation.

70926 Olsen, J. Not a park to go barefoot in. SPORTS ILLUS. 26(14): 58-60, 65-69, 72, Apr. 3, 1967. Illus.

The Ten Thousand Islands, half of which lie in Everglades National Park, have a great variety of fish, wild birds, snakes and alligators. This article describes the area, its wealth of bird life, and the attitudes of the inhabitants to visitors and the park rangers.

70927 Papodokis, J. Crystal Ice Caves, Idaho. NSS NEWS, 25(8):154-159, Aug. 1967. Maps, photos.

Crystal Ice Caves, one of the larger underground openings in the lava fields near American Falls, Idaho was first opened to the public as a commercially developed enterprise in 1965. Early explorations and the geology of the Caves are reported.

70928 Pearson, R.C., Hayes, P.T., Fillo, P.V. MINERAL RESOURCES OF THE VENTANA PRIMITIVE AREA, MONTEREY COUNTY, CALIFORNIA. Washington, Govt. Print. Off. 42p. 1967. Ref., maps, photos, tables. (U.S. Geological Survey. Bulletin 1261-B).

This bulletin is one in a series of studies related to wilderness areas and presents an evaluation of the mineral potential of the Ventana primitive area in Los Padres National Forest. Separate geologic maps are included in envelope on the back cover.

70929 Peterson, R. ANOTHER VIEW OF THE CITY. New York, McGraw-Hill. 220p. 1967. Illus.

This book is a chronicle of the changing seasons in the Sandy Hook region on the coastal edge of New Jersey within sight of New York City. The wildlife of the particular area is described as well as sports and outdoor recreation enjoyed by the author, a naturalist and staff mammalogist with the American Museum of Natural History. The flowers blooming throughout the year and vegetation are observed. QH105 N5P4

70930 Peterson, W. The Mogollon Rim. ARIZ. HIGHW. 43(10):2-12, 29-33, 38. Oct. 1967. Maps, photos.

The article is divided into 8 parts which discuss the geologic history and formation, the ancient cultures, the military history, trails, the pioneers, the economy, and the author's personal observations and experiences as a recreation resource expert of the Mogollon Rim, Arizona's mighty backbone. The concluding paragraphs discuss the impact of recreation, its twentieth-century connotation, on this beautiful, unspoiled area.

70931 Pettingill, O. Guam—boondocks unspoiled. AUDUBON, 69(5): 8-12, 14-20, Sept.-Oct. 1967. Map, photos.

The author discusses the history, flora, and birds of the South Pacific Island of Guam. Detailed travel instructions are given for birders planning a trip to the area.

70932 Place, M.T. THE YUKON. New York, Ives Washburn. 211p. 1967. Ref., map.

The history of Alaska and its great river, the Yukon, is portrayed from the time of the Russian settlement to the present day. The conquering of Mount McKinley and the creation of Mount McKinley National Park are described. The recent controversy over creation of the Rampart Dam on the Yukon River is also included. F912 YP55

70933 Rich, L. Escape to the Outer Banks. FORD TIMES, 60(3):12-16, Mar. 1967. Map, photos.

The fascination islands of the Outer Banks, rich in pirate lore, are now accessible by bridge to the motoring public. The area is being developed to accommodate increasing numbers of tourists, who are discovering its charm. Popular activities are fishing, swimming, shell collecting, driftwood collecting, birdwatching, treasure hunting, or jouncing along miles of empty beach in a rented beach buggy.

70934 Roosevelt Memorial dedicated. PARKS RECREAT. 2(12):26-28, Dec. 1967. Photos.

A memorial to President Theodore Roosevelt, including a statue, moat area, and granite slabs with inscriptions of his speeches, was recently dedicated by President Johnson on the Theodore Roosevelt Island, midway in the Potomac River, opposite Washington, D.C. The 88-acre island is undeveloped and is a haven for small wildlife. Its history from 1632, when Charles II granted the land to Lord Baltimore, to the present is recorded.

70935 Russell Cave dedicated; New Visitor Center named for Gilbert H. Grosvenor. NAT. GEOGRAPH. 132(3):440-442, Sept. 1967. Photos.

The Russell Cave National Monument was officially dedicated on May 7, 1967, by the National Park Service. The National Geographic Society purchased the cave and surrounding 310 acres of farmland in northeastern Alabama and donated the property to the Department of the Interior. The cave is the site of man's oldest known habitation in southeastern United States. Scientists from the Smithsonian Institution made excavations in the cave for three years to probe the secrets about the ways of life of the Stone Age Americans who had inhabited the cavern.

70936 Schuler, S. AMERICA'S GREAT PRIVATE GARDENS. New York, Macmillan. 221p. 1967. Maps, photos.

In planting gardens, the gardener must be aware of the climate and the geology of the area. The plants and type of garden desired have a definite effect on the design. The book presents basic principles of successful gardening with illustrations of 37 of the best gardens in the United States. SB446 U6S3

70937 Schultz, E.W. Recreation opportunities in the national forests. FOR. FARM. 26(11):10-11, July 1967. Photos.

The 33 national forests in the South contain a total of 1064 developed recreation sites. Ranging from Virginia to Oklahoma, these forests offer a wide choice of recreation opportunities: from fishing and hunting to camping, swimming, picnicking – or just plain sightseeing. Last year these 33 national forests had 16 million visitor-days of use. Water-oriented recreation can be found at 99 boating sites and in 94 swimming areas.

70938 Simmons, H. Mountain playground. N. MEX. MAG. 45(8):22-25, 36, Aug. 1967. Photos.

The Sandia Mountain Recreation Area near Albuquerque, New Mexico offers a variety of recreation throughout the seasons. In the winter, skiing predominates; summer offers fishing and hiking; spring brings bird-watching; and fall – hunting. The opportunities and resources of the 100,000 acres are described.

70939 Ski at night without snow. AMER. CITY, 82(5):35, May 1967. Photos.

Ski slopes covered with plastic tile instead of snow and having outdoor floodlights have made skiing a popular nighttime sport at Ski Villa in balmy southern California. The plastic snow-like covering on these slopes of Carbon Canyon near Los Angeles, the outdoor lighting fixtures, and Ski Villa facilities are described.

70940 Sloane, H.N., Sloane, L.L. THE GOODYEAR GUIDE TO STATE PARKS. REGION 2: CALIFORNIA, WASHINGTON, OREGON, ALASKA, HAWAII. New York, Crown Publishers. 298p. 1967. Photos, tables.

This is the second in a series of six guides, which cover information on State parks, forests, beaches and other State-operated areas as well as national parks and historic sites. Data on activities, recreation facilities, their location and accessibility, fees and regulations are given. The guide includes more than 700 recreational areas for vacationing or day visitation and relaxation.
SK601 S6 v.2

70941 Smith, A.G. A guide to U.S. toll roads, bridges and tunnels. CAMP. GUIDE, (52):28-29, 39, 41, July 1967.

Provides a State-by-State listing of tolls on roads, bridges and tunnels. The Northeastern States and a few Midwestern States have the most tollroads. For the rest of the Nation, most highways are free of charge.

70942 Smith, G.M. The Sawtooth Country of Idaho. SUMMIT, 13(3): 2-7, Apr. 1967. Map, photos.

The Sawtooth Mountains are a "backpackers' paradise." Around the perimeter of the primitive area are campgrounds for tent and trailer camping, lodges, stables and marinas. Several hiking trails are described in detail.

70943 Spiker, L. The Cranberry Islands. DOWN EAST, 13(8):30-35, May 1967. Photos.

The Cranberry Islands consist of four: Great and Little Cranberry, Baker, and Sutton, which lie at the entrance to Somes Sound and Southwest Harbor on Mt. Desert Island. Novels and bibliographies provide historical accounts of colorful island personalities. The Islesford Museum houses relics of the islands' history. With modern innovations island life today is similar to that on the mainland.

70944 Starbird, E.A. From sword to scythe in Champlain country. NAT. GEOGRAPH. 132(2):153-201, Aug. 1967. Maps, photos.

From the turbulent and strife-torn early days to the present, this article describes recreation opportunities and historical highlights about Lake Champlain and its surrounding region. Numerous color photographs illustrate scenery and outdoor activity.

70945 Starr, W.A., Jr. GUIDE TO THE JOHN MUIR TRAIL AND THE HIGH SIERRA REGION. Tenth ed. San Francisco, Sierra Club. 136p. 1967. Map, tables.

This guidebook which first appeared in 1934, reflects the changes which have occurred over the years in the High Sierra Region. National Park superintendents and National Forest supervisors preferred this edition. Each section of the Trail is described according to the following regions: (1) Yosemite National Park Region; (2) Middle and South Forks of the San Joaquin River Region; (3) Middle and South Forks of Kings River Region; and (4) Sequoia National Park Region. Elevations and distances between points on the route are included; special map inserted in back cover was prepared for use with this guide.
F868 S5S7 1967

70946 Stephens, R. The Green Mountains. VT. LIFE, 21(4):34-46, Summer 1967. Map, illus., photos.

The outstanding features—geology,

forests, history, roadways, trails and natural beauty of the Green Mountains, which cover the length of Vermont, are described. Expanding visitor use (4 million in 1966 vs. 2 million 10 years ago) and commercial investment for recreation are prompting the Central State Planning Office to continue programs for preservation of open space and scenic values as well as provision for room for more people.

70947 Sterling, D. THE OUTER LANDS. A NATURAL HISTORY GUIDE TO CAPE COD, MARTHA'S VINEYARD, NANTUCKET, BLOCK ISLAND AND LONG ISLAND. Garden City, N.Y., Natural History Press. 192p. 1967. Maps, illus.

This book is a guide to the animal and plant life of the Outer Lands, the chain of islands and peninsula between the New England coast and the Atlantic Ocean. Only the ecological communities along the shore within range of the sea wind and salt spray are treated. It does not include the dynamic relationships of the animals and plants of the inland areas which are similar to those on the mainland. The appendix contains a checklist of scientific names of invertebrate, vertebrate and plant species. QH95.7 S7

70948 Stouffer, C.W. A pictograph cave in Kings Canyon National Park. NAT. PARKS MAG. 41(236):16-17, May 1967. Photos.

A pictograph cave in an area once used as a prehistoric campsite delights modern visitors and campers in Kings Canyon National Park.

70949 Stout, G.D., ed., and others. THE SHOREBIRDS OF NORTH AMERICA. New York, Viking Press. 270p. 1967. Ref., Illus.

This book is a treatise on the shorebirds of North America and contains current scientific material for the serious student. Peter Matthiessen prepared the text in the form of an essay which describes the habits and life history of these birds. The illustrations are plates from paintings of Robert Clem. The birds are divided into 11 families, six of which are treated in this book according to ecological association. Scientific and technical information about each of the six species is given in the appendix. QL681 S78

70950 Symons, R.D. HOURS AND THE BIRDS. A SASKATCHEWAN RECORD. Toronto, Univ. of Toronto Press. 224p. 1967. Maps, illus.

This is a history, philosophy, topographical and ecological guide book, containing social commentary, encapsuled in the story of the author, who has portrayed his observations by brush and narration in those years between 1914 and 1966. Birds are depicted in relation to the environment and ecological setting. Their usefulness and effect on human thought as portrayed in art, music, and poetry are noted. QL685 S9

70951 Thomas, S. Alaska. TRAIL. LIFE, 27(5):40-43, 92-97, May 1967. Map, photos.

This is a description of the recreation opportunities in the 49th State. Facts of interest to trailer campers are emphasized.

70952 Thomas, S. Nebraska. TRAIL. LIFE, 27(7):38-41, 64, 66, July 1967.

Nebraska's recreation areas with fees and facilities are described.

70953 Thomas, S. New Hampshire. TRAIL. LIFE, 27(8):46-49, 80-83, Aug. 1967. Photos.

The recreational facilities of New Hampshire are listed, and fees for trailer spaces given.

70954 Thomas, S. Silver on the sage: Nevada. TRAIL. LIFE, 27(12):44-47, 80-81, Dec. 1967. Photos.

Nevada's recreation areas and facilities for trailerists are described.

70955 Tilden, P.M. The Red Rock Recreation Lands. NAT. PARKS MAG. 41(242):2, Nov. 1967. Map.

A brief description is given of the dedication of Red Rock Canyon Recreation Lands which consists of some 70,000 acres of the public domain in Nevada.

70956 U.S. Dept. of the Interior. NATURAL RESOURCES OF INDIANA. Washington, Govt. Print. Off. 52p. 1967. Photos.

This booklet describes the history, present and future development, scenic beauty, industrial development, recreational opportunity, and natural resources of Indiana. A summary of programs of Federal natural resource agencies is included.

70957 U.S. Dept. of the Interior. NATURAL RESOURCES OF SOUTH DAKOTA. Washington, Govt. Print. Off. 72p. 1967. Map, photos, tables.

This booklet describes the history, present and future development, scenic beauty, industrial development, recreational opportunity, and natural resources of South Dakota. Included is a guide which lists major outdoor recreation areas and facilities in the State. A summary of Federal programs devoted to natural resources also is contained.

70958 Usinger, R.L. THE LIFE OF RIVERS AND STREAMS. New York, McGraw-Hill. 232p. 1967. Ref., maps, illus., photos.

The book deals with the ecology of aquatic plant and animal life, and freshwater biology. An appendix contains a description of rivers and streams in the National Park System and a guide to aquatic insects and vanishing fishes. Several major rivers are discussed and consideration is given to pollution and conservation problems.
QH97 U8

70959 Utah has its own ancient bristlecones. SUNSET, 138(5):34, 36, May 1967. Map, photos.

Cedar Breaks National Monument and the surrounding high ridges of Dixie National Forest are recommended as the best places in Utah to see bristlecone pines. Other states with bristlecone pine forests are California, (which has the largest forests and oldest trees), Arizona, Colorado, Nevada, and New Mexico.

70960 Valyer, G. Douglas County State Lake. KANS. FISH GAME, 25(2): 3-4, Spring 1967.

A description is given of Douglas County State Lake and its surrounding area in Kansas. The Lake has many recreational activities, such as, fishing, boating, picnicking, and horseback riding.

70961 Walker, L.W. Standing room only. NAT. WILDL. 5(5):42-47, Aug.-Sept. 1967. Photos.

This article describes the millions of birds which come south from Canada and north from Panama to Isla Raza in the Gulf of California. It relates the events which led to the establishment of the Island as a waterfowl sanctuary by the President of Mexico on May 30, 1964. The National Wildlife Federation, the National Audubon Society, the Arizona-Sonora Desert Museum, the California Academy of Sciences and some renowned conservationists, such as, Joseph Wood Krutch, Roger Tory Peterson, and others from several countries have saved this great natural heritage from destruction.

70962 Wheeler, S.S. THE DESERT LAKE. THE STORY OF NEVADA'S PYRAMID LAKE. Caldwell, Idaho, Caxton Printers. 137p. 1967. Ref., maps, photos.

Archaeological studies on Pyramid Lake reveal the cultural, social and economic development of the early peoples who migrated by land from Asia and settled on the American continents. Modern history of the region dates from 1844 when Capt. John C. Fremont first reached the Lake and described it in his report. The northern Paiute Indians were inhabiting the region at that time. The beauty of the Lake in the present time, its natural rock formations, the abundance of fish which attract worldwide anglers, the availability of water sports, the wide variety of recreation activities, and the animal and plant life of the Lake are vividly described. F847 W3W5

70963 Whitaker, R.B. Colorful lakes on the Colorado. ARIZ. HIGHW. 43(5):2-5, May 1967. Photos.

The Colorado River in the Grand Canyon, the reservoirs, impoundments, and the location and fishing value of the lakes and creeks are described.

70964 Whitaker, R.B. Good fishing in the Indian country. ARIZ. HIGHW. 43(5):34-36, May 1967. Photos.

The Indian reservations and lands in Arizona have a wealth of good fishing. A description is given of the rivers, streams, lakes, types of fish, and camping facilities available on the reservations.

70965 Whitaker, R.B. Heartland stream of Arizona. The Tonto. ARIZ. HIGHW. 43(4):8-25, Apr. 1967. Map, photos.

Lovely sylvan scenes abound in the Tonto Creek area, and such other sights, as, historic cliff dwellings, Zane Grey's cabin, a trout hatchery, campgrounds, a national forest, and desert mountain communities with the flavor of the Old West are described.

70966 Whitaker, R.B. Let's go fishing in Arizona. ARIZ. HIGHW. 43(5):6-11, 30-33, May 1967. Map, photos.

A description is given of the lakes, creeks, and reservoirs in Arizona. The location, the natural scenic beauty and the fishing potential of each of these bodies of water are discussed.

70967 White, M. City of rocks. N. MEX. MAG. 45(5):26-29, May 1967. Photos.

A geological phenomenon is a "city" in New Mexico which has no human residents, but still entertains thousands of visitors every year. Known as the City of Rocks, it is a State park near Deming. Because of the texture and shape of the rock formations, the City of Rocks is unique among eroded stone wonderlands of the Southwest. Other attractions of the State park include 56 picnic sites, campgrounds with full facilities, a special children's play area, and a desert botanical garden.

70968 White, W.R. The speleography of Great Salt Peter Cave. NSS NEWS, 25(9):169-174, Sept. 1967. Ref., maps, photo.

The geology, topography, and history of the Great Salt Peter Cave in Kentucky are recounted. Several years after its discovery, the Cave was used as a salt peter mine. In the early 40's the Cave was promoted as a tourist attraction but was soon abandoned for commercial purposes and lapsed into obscurity. In 1966 the State of Kentucky expressed interest in creating a State Historical Park in the area and developing the cave for tourists.

70969 Widdison, J.G. Lake Peak—Sacred Mountain. N. MEX. MAG. 45(9):14-17, 36, Sept. 1967. Photos.

Lake Peak, above Santa Fe, N. M., is the southernmost high summit south of the Sangre de Christo range. Some of its history and a physical description of the mountain are described. Recreation opportunities of the area are also given.

70970 Wilke, L.A. High country fishing fun. OUTDOORS, 9(1):14-17, June 1967. Photos.

The article describes the country and the resources which lie astride the Rockies and the Continental Divide in Wyoming, Idaho, Colorado and New Mexico, and the proposed trails to cross Federal lands in the national forests in this sector.

70971 Willis, F. High level dams create fishing bonanzas. KY. HAP. HUNT. GROUND, 23(5):16-17, Sept. 1967. Photos.

The Markland Locks and Dam on the Ohio River have resulted in marked increase in fishing. The location and camping facilities of its backwater lakes are briefly described.

70972 Wills, D.W. Red River Wildlife Management Area. This is your land. LA. CONSERV. 19(5/6):2-4, May-June 1967. Map, photos.

The Louisiana Wild Life and Fisheries Commission purchased a tract of land bordering the Red River with funds from the Russell Sage Foundation. Additional adjacent land is leased. The area will be managed to provide good hunting and fishing.

70973 Wohlgemuth, D. The exotics are coming. Pheasants in your future? GA. GAME FISH, 2(2):9-10, Feb. 1967. Photos.

High on the list of game sought by hunters is the pheasant. The bird stocked in Georgia is a cross between the ringneck pheasant and the Iranian blackneck pheasant. Stocked jungle fowl present more hope for the biologists than the pheasants. Areas in the State where the birds are released and biological problems in their adjustment to new habitat are discussed.

70974 Young, J.V. The birth of the sands. N. MEX. MAG. 45(10):14-15, Oct. 1967. Map, photos.

Lake Lucero is the birthplace of the living dunes of White Sands National Monument, New Mexico. The Lake is dry and very flat with no natural drainage. Gypsum grains are still produced and make up the dunes for which the area is unique. The Lake, located in Sands National Monument which is surrounded by the Missile Range, can be opened to the public just four times a year. Access is only through the White Sands Missile Range.

70975 Yukic, T.S. Impact of a distinctive university recreation area. PARKS RECREAT. 2(11):35-36, Nov. 1967. Photo.

To provide recreation and a social facility designed for leisure time use for students, employees, and faculty, the Berkeley campus of the University of California has constructed the Strawberry Canyon Recreation Area. Here faculty and students may meet informally. The recreation facilities include a clubhouse, two swimming pools, a children's wading pool, several social and lounging areas, and an attractive picnic-barbecue space. Although the major social and recreation unit is the large student union complex, the Strawberry Canyon Recreation Area implements the University structure and adds a new dimension to varied leisure-time experiences.

70976 Abrahams, J.H., Jr. Solid wastes – a national conservation problem. J. SOIL WAT. CONSERV. 22(5):201-203, Sept.-Oct. 1967. Ref.

The author discusses solid wastes and their disposal in terms of costs and pollution problems. The Solid Waste Disposal Act of 1965 and the research it has encouraged are described. The author implies that Americans must break away from planned obsolescence habits and attempt to reuse rather than dispose of solid wastes.

70977 Accokeek Foundation, Inc. A STUDY ANALYSIS OF THE PROBLEMS OF PRESERVING RECREATIONAL AND OPEN SPACE LANDS. Washington, D. C. 414p. 1967. Ref., maps, illus., tables.

This report is a thorough discussion of the problems concerning acquisition and retention of lands for recreation and scenic uses. Easements are but one of a number of devices for controlling the use of land. Open space may be preserved by other methods. However, this study basically considers the legal, economic, and social aspects of scenic easements.

70978 Ade, G. Camp-omania – ferment and fuss! TRENDS PARKS RECREAT. 4(4):5-11, Oct. 1967. Map, photos.

All government and private enterprises must join to combat the complex problems created by the great exodus to the outdoors. Camping land is at a premium, especially in the national parks during the summer, and fees are being charged for use of camping facilities. Progress is made on all levels to afford the public more recreational opportunities. Possible solutions for bringing the needs of the people and the land back in balance are education of the young and camping in places other than crowded parks. Opportunities provided by the private sector – campgrounds on private lands, working ranches, etc. – must not be overlooked.

70979 Ade, G. Will they boom or bust? A camper looks at franchised campgrounds. BET. CAMP. 8(4):22-25, 60-61, Apr. 1967. Photos.

A new system of distribution of campgrounds has developed as a result of the tremendous increase in campers. Examples of regional and national franchised campgrounds are described and the future of chain operation is discussed.

70980 Agee, J.L. Water quality standards. AMER. WAT. WORKS. ASSO. J. 59(12):1501-1503, Dec. 1967.

In compliance with the Water Quality Act of 1965 forty states had submitted guidelines on a preliminary basis to water quality control at the date of presentation of this paper (June 6, 1967). Four specific guidelines are discussed. Five technical advisory committees have been appointed to recommend specific water quality requirements and identify specific research needs to develop meaningful water quality criteria. The National Technical Advisory Committees include the following water uses: public water supplies; industrial water supplies; recreation and aesthetics; agricultural uses; fish, aquatic life, and wildlife.

70981 Ahrens, C. We must make conservation real. VA. WILDL. 28(12):

19-20, Dec. 1967. Photos.

In order to inculcate an enthusiasm for conservation into young Americans at school, all teachers should impress upon students the importance and reverence for the common things, pure air, clean water, and the natural environment.

70982 Airis, T.F. The joint use concept – District of Columbia experience. In: American Association of State Highway Officials. ACTIVITIES OF 1967: ANNUAL REPORT OF PROGRESS AND PAPERS ON HIGHWAY RIGHT-OF-WAY PROBLEMS, 53d ANNUAL MEETING, 1967. Washington, D. C., Committee on Right-of-Way, American Association of State Highway Officials. 36p. 1967. Maps, illus., photos, tables.

Experience in the Nation's Capital with air rights over urban expressways is reviewed. The D. C. Government has been proceeding with projects based on the concept of joint air rights development. Two recent examples are provided. Legislation is needed. Although the D. C. Government can and does now enter into joint use concept projects with Federal agencies, it cannot lease or rent air space to non-government agencies. Three pieces of proposed legislation on this subject are included and explained.

70983 Allard, W.A. Yellowstone wildlife in winter. NAT. GEOGRAPH. 132 (5):636-661, Nov. 1967. Map, photos.

This article is a summary of methods used for winter wildlife management in Yellowstone National Park. The Park Rangers vaccinate animals against undulant fever, practice selective hunting, and tag animals for scientific research.

70984 Allee, D.J. Place of water resources planning in economic regional development. In: Water Symposium, State University of New York at Buffalo, 1966. THE FRESH WATER OF NEW YORK STATE: ITS CONSERVATION AND USE. Dubuque, Iowa, Wm. C. Brown. p. 170-180, 1967. Ref.

Solutions to water resource problems lie in the improvement of planning analysis, especially economic analysis, and investment in resource development which combines improved technological and organizational development for an increased quantity and quality of the natural resource. Comprehensive river basin planning, multiple purpose planning, and municipal needs will attract industry, business, agriculture, residents and facilities growth.

70985 Allen, D.L. Natural resources and the cult of expansion. CONSERVATIONIST, 22(3):4-10, Dec.-Jan. 1967-68. Photo.

The author, a noted biologist and director of a classic wolf-moose study, examines attitudes toward population and the economic system. In this speech, consideration of the objectives in the resolution of resource problems and the relationship of the population to resources is raised. Limitation of the world population through birth control would conserve resources and produce better living. The essence of resource planning is to identify investments of lasting worth. Man must realize his place in the world's ecosystem.

70986 Allin, R.W. Inadequate water supply threatens Everglades National Park. PARKS RECREAT. 2(10):37, 51-54, Oct. 1967. Photos.

Everglades National Park, created in

1934 to perpetuate unique, aquatic-based ecological systems, is in grave danger because the diversion of water in the central part of Florida is drying up the swamplands which provide life and nourishment to many species of birds, fish, and reptiles. Proper water management in central and southern Florida can preserve the natural biological conditions and balances. Federal flood control policy is discussed.

70987 American Camping Association. Annual report for 1966. CAMP. MAG. 39(4):10-13, Apr. 1967.

Highlights of important gains during the year include: national recognition of the ACA Standards Program . . . ACA membership increases . . . a larger number of accredited camps . . . several successful conventions held, including the Institute of Camp Directors with about 200 directors participating . . . publication of books, pamphlets, leaflets, and surveys . . . and the sponsoring of numerous vital projects, including field services.

70988 American Camping Association. U. S. Bureau of Outdoor Recreation. OUTDOOR RECREATION – CAMPING. A REPORT ON THREE SEMINARS, 1964, 1965, 1966. Martinsville, Ind. 78p. 1967. Ref.

The publication contains a brief summary of the deliberations of "Seminars on Outdoor Recreation – Camping" at which 20 camping organizations and 10 branches of Federal and State Government participated in 1964, 1965, and 1966. Section I, the 1964 workshop, emphasized Camp Site and Development. Section II, the 1965 seminar, was devoted to Land Use Policies Concerning Camping, and Section III, the 1966 seminar dealt with Camping Stewardship of the Outdoors – America's Citizens' Responsibility. Five objectives of the three seminars were listed. An extensive bibliography is included. Specific papers have been indexed under the individual authors.

70989 American Telephone and Telegraph Company. The plot to bury the Bell System. PARKS. RECREAT. 12(12): 17-18. Dec. 1967. Photos.

Because of the advantages and demands for buried telephone cables, the Bell Telephone System plans to place buried cable in all new areas whenever it is technically practical and economically feasible.

70990 Anderson, G.B. How to stop suburban soil erosion. AMER. CITY, 82(12):102, 104-105, Dec. 1967. Photos.

To reduce soil erosion and sedimentation as new suburban areas are developed, Fairfax County, Va. recently passed a conservation law which requires developers to submit a conservation plan for erosion and sediment control concurrently with construction and site plans as well as post bond with a cash escrow to guarantee the conservation work. Under the new law, developers must: (1) keep exposed land areas as small as possible and barren for only as short a time as possible; (2) plant temporary or permanent vegetation on exposed areas where feasible; (3) build sediment basins to trap runoff water; (4) fit development to topography and soils to minimize erosion; (5) retain natural vegetation where practical.

70991 Andrews, G.H. Highways and conservation. In: American Association of State Highway Officials. AC-

TIVITIES OF 1967: ANNUAL REPORT OF PROGRESS AND PAPERS ON HIGHWAY RIGHT-OF-WAY PROBLEMS, 53d ANNUAL MEETING, 1967. Washington, D. C., Committee on Right-of-Way, American Association of State Highway Officials, 91p. 1967.

The Assistant Director for Highway Development in the State of Washington reports on the Department's policy and how the construction of rest areas, landscaping, and other scenic enhancement features are funded. Washington also has an active program of identifying historical landmarks. The master plan for recreation use and development of the new scenic North Cascade Highway specifies "ski areas, trail heads, campgrounds, picnic areas, hiking and trail supply outfitters, view points and special-use developments by lease arrangement." The highway plan has been located, designed and even shifted to best accommodate these various activities.

70992 Anthrop, D.F. Redwood National Park, LIV. WILDERN. 31(96/97):36-47, Spring-Summer 1967. Photos.

The Wilderness Society states its position in favor of the Cohelan-Metcalf proposal of a Redwood National Park of at least 90,000 acres. The article is a photo essay of areas involved in the proposed Redwood National Park controversy.

70993 Arnold, M.D. Present Status and Research Needs on Relationships between Recreation and Water Quality. Remarks before the 12th annual Water for Texas Conference, Texas A & M University, College Station, Texas, Nov. 21, 1967. (Denver, Colo.). 7p. 1967.

More research is needed on the relationships between water quality and recreation. It could reveal where the demand for outdoor recreation might be met by investment in pollution control measures rather than by more acquisition of land or water areas. Today some of America's finest recreation waters are polluted to such a degree that recreation must be restricted or severly limited. Other areas for research are specified. Several courses of action to overcome the problem of pollution of recreation waters are offered.

70994 Aspinall, W.N. Dollars for national growth or for handouts – which shall it be? In: National Reclamation Association. COMPENDIUM, 36th ANNUAL CONVENTION, 1967. Honolulu, p. 184-193, 1967.

There is a changing philosophy in Washington which forebodes ill for the support of natural resource development programs. These programs build the national economy and are vital to the Nation's future. The speaker, Chairman, House Committee on Interior and Insular Affairs, stresses the importance of the Federal reclamation program in the past and its great potential for the continuing economic growth. There is need to combat the unfavorable publicity given the Corps of Engineers' and the Bureau of Reclamation's programs in recent articles in several national magazines. In the years ahead, there will be increased competition for Federal support. Reclamation projects prevent losses of our natural resources, have beneficial by-products, and add to the wealth and strength of America. TC801 N3 1967

70995 Barkley, B.T., Atwater, D.S., Clausen, M. AIR AND WATER POLLUTION. Columbus. 86p. 1967. Maps, tables.

(Ohio. Legislative Service Commission. Staff research report No. 84).

Air and water pollution in Ohio, as in most states, are on the increase. This report considers various aspects of both air and water pollution, including sources, degree of pollution, prevention, both by technological and statutory methods, and the economic costs of pollution. The Water Pollution Control Board also offers several measures to increase its effectiveness. These include an enlargement of staff, more powers, a larger budget, increased cooperation between the Board and local enforcement agents, and increased inspection. The Board also asks for the establishment of an Air Pollution Control Board, that would have similar authority to the Water Pollution Control Board and power to define and enforce standards of air quality. TD420 B25

70996 Battle, T.W., Simpson, B. The Wildlife Federation as a conservation tool. WILDL. N.C. 31(9):8-9, Sept. 1967. Photo.

The organization and functions of the North Carolina Wildlife Federation are described.

70997 Beazley, R. Conservation decision-making: a rationalization. NATUR. RESOURCE. J. 7(3):345-360, July 1967. Ref.

The attempt to express our conservation taste or values in renewable resources represents a goal. This goal is concerned with the level of investment which we maintain in these resources over time, and how and where they will be organized and managed at any given point in time. A review of the organizations involved in this conservation goal is included in this presentation. Discussion is also given to the subjects of the decision-making process and a rationalized structure for conservation decisions.

70998 Behan, R.W. The succotash syndrome, or multiple use: a heartfelt approach to forest land management. NATUR. RESOURC. J. 7(4):473-484, Oct. 1967. Ref.

A review of the "multiple use" concept as currently practiced by the forestry profession is the basis for this article. The commingling products of the forest, wood, water, forage, recreation, and wildlife are questioned as to the need to be mixed. The assumption is made that the best use for such resources is the most varied use. Criticism is not extended to "single use" or "multiple use" per se, but at the failure to examine the assumptions that make multiplicity an explicit objective of management.

70999 Behme, B. Should we save the Salton? FIELD STREAM, 72(4):8-10, 12-13, Aug. 1967. Photos.

The Salton Sea in southern California is increasing in salinity and chemical content which threatens to ruin the area for recreational purposes. This article tells the problems of the Sea and measures that should be taken to protect the recreational value of the area.

71000 Bell, G.T. Make the most of every spare corner. PARK ADMIN. 32 (5):36-37, May 1967. Photos.

Park administrators must plan landscaping in areas other than parks themselves. Such landscaping and planning are beneficial to the whole community. The need to restore the

British countryside to its former scenic splendor is emphasized. Many sites have lain useless for a decade or more, and weed-strewn areas among municipal housing developments and much of suburbia should be cultivated to make an aesthetically pleasing landscape and townscape. Better coordination among different units of local governments is needed to restore beauty in the visual surroundings.

71001 Bemiss, F. The Virginia outdoor plan. A year of progress. VA. WILDL. 28(7):4-5, 22-23, July 1967. Photos.

Virginia has initiated its outdoor recreation plan to conserve and develop recreation resources for the next decade, 1966-1976. The basis of the Plan, the five general categories of which it is composed, the authorizing legislation, and progress in implementation are discussed.

71002 Bennett, G.L. Yellowstone Bruins. COLO. OUTD. 16(4):32-34, July-Aug. 1967.

The population explosion of both people and bears in the Yellowstone National Park has presented major problems to the National Park Service. To learn more about the black bears, the Park Service sponsored a graduate field study for two Colorado State University students. The daily habits of the bear are analyzed for improved techniques in management.

71003 Bethlehem Steel and WJAC give lands. WAT. LAND LIFE, 9(1):18, 23, Apr. 1967.

For the proposed Laurel Ridge State Park project, Western Pennsylvania Conservancy has received two fine tracts of land. Bethlehem Steel Corporation donated approximately 1200 acres; and a radio and TV station in Johnstown has given an important 105-acre tract for the proposed park.

71004 Beuscher, J.H. WATER RIGHTS. Madison, Wis. College Printing and Typing Co. 439p. 1967. Ref., maps, illus., photos., tables.

More knowledge about water rights is needed because of heightened public concern over water quality, use of water for recreation, and other water uses. Professor Beuscher, University of Wisconsin Law School, explains – by means of legal cases and problem illustrations and editorial comments – a number of aspects of water law. Besides diffused surface water, ground water, and riparian rights law, the book stresses conflicts between riparian private rights and claims of non-riparian members of the public – particularly with regard to recreational uses of water. Some attention is given to Federal-State and interstate law problems. A substantial chapter on water pollution control is included. WATER RIGHTS is a useful book for the conservationist, the lawyer, the water resource manager, the urban and regional planner, and the citizen who is concerned about the quality of the water in his environment. KB178 W3B4

71005 Bicycles: How parks are meeting the demand for facilities. PARK MAINTEN. 20(6):12-17, June 1967. Maps, illus.

With increased urbanization and bicycle boom (60 million active cyclists) the necessity for bike trails has increased. This article offers three case studies in Milwaukee, Philadelphia and Wheaton, Maryland, as well as a summary of 12 urban projects. Construction, costs, and usage of bike trails are reported.

71006 Bitterlich, W. Allgemeine Wohlfahrtsbewertung siedlungs – naher Wälder – nicht durch gutachtliche Schätzung, sondern durch objektive Messung. In: International Union of Forestry Research Organizations, PAPERS, 14th Congress. Munich, DVFFA. 7(26): 406-414, 1967. Ref.

General welfare – rating of forests close to populated areas not through authoritative opinion but through objective survey. (translation of title) This article contains summaries in German, English, and French.

71007 Blalock, J. The sporting suit. AMER. BAR ASS. J. 53:58-62, Jan. 1967. Ref., photo.

The legalities of mountain climbing are discussed. There are legal hazards of this perilous sport. More consideration should be given to ensuring that all possible precautions are taken by mountaineering clubs as well as by individual participants. Numerous cases which involved legal actions against clubs and individuals are cited.

71008 Boggs, G.D. The administration of a Great Lakes recreational resource by an agricultural municipality. A case study in Bosanquet township. ONT. GEOGR. (1):45-54, Jan. 1967. Map.

The paper examines the political and administrative problems involved in the orderly development of recreational facilities in a typical Ontario township.

71009 Boggs, G.D. The role of conservation authorities in recreational planning – the role of government – a panel discussion. In; Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, The Conservation Council of Ontario, p. 25-29, 1967.

The function of conservation authorities, the unique values afforded by conservation authorities, and the current challenges facing the government in regional recreational planning are discussed. Conservation authorities provide facilities or undertake resource management schemes on a natural regional basis.

71010 Borset, O. Beziehungen zwischen Waldbau und Erholung. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA, 7(26):85-92, 1967. Ref.

Relation between silviculture and recreation. (translation of title)

71011 Boyd, E. Tomorrow under the sea. SKIN DIV. MAG. 16(4):47-49, Apr. 1967. Illus.

The author visualizes and describes an underwater hotel of the future; and enumerates the challenges, economic and otherwise, of underwater living as revealed by the Navy's Sealab and Jacques-Yves Cousteau.

71012 Boyle, R.H. How to stop the pillage of America. SPORTS ILLUS. 27(24):40-42, 45-46, 48, 53, Dec. 11, 1967. Illus.

To stop the plunder of American natural resources, this article makes and explains precise recommendations. An essential first step is for Congress to establish a National Council of Ecological Advisers. It would offer suggestions about how to improve the environment and prevent dangers to it, and about the best use of natural resources. The Council should be composed of a center of senior scientists, and supplemented by leading conservationists and representatives from industry, labor and agriculture. Secondly, an ecological inventory should be made by the Federal Government and the 50 States, with the resulting data to be evaluated, coded and computerized. Another recommendation is that the Department of the Interior be reorganized into a Department of Natural Resources. The majority of troubles now are because no single person, agency, bureau or department in the Federal Government has an over-all view of what is happening to our lands and waters. In addition, Congress should pass a strengthened Fish and Wildlife Coordination Act. Federal legislation is needed to protect coastal estuaries and marshes. Both Federal and State tax policies should be examined carefully to make certain they encourage the wise use of land. Pollution abatement laws should be enforced; the use of persistent poisonous pesticides should be barred. It is important that active educational steps be taken to develop in Americans a "land ethic" and an "ecological conscience." Prompt nationwide action should stop this plunder and save America's natural resources.

71013 Brandborg, S.M. The Wilderness Act in practice: the first three years. WILDERN. SOC. REP. 4(1):2-12, May 15, 1967. Tables.

This report is a critical assessment of the operation of the Wilderness Act and was presented to the 10th Biennial Wilderness Conference in San Francisco in April 1967. The law explicitly requires hearings and review procedures before Wilderness System areas may be established. Local wilderness committees and conservation groups have conducted studies to determine the adequacy of wilderness proposals of the Forest Service, National Park Service, and Bureau of Sport Fisheries and Wildlife. Opposition to Wilderness Area proposals at the hearings has been light. These reviews have acquainted citizens with their responsibility for conservation programs. Profit-oriented business interests threaten the public interest in wilderness lands. The Wilderness Law has revealed the necessity for reviewing Federal agencies' past planning and managment practices. These agencies are now in a stronger position to protect wilderness because of the Act. Pressure from mining companies is a threat to wilderness preservation. Despite shortcomings and early difficulties, the Wilderness Act is fulfilling its mission. At the end of the report there is a table which lists all wilderness area proposals with dates of hearings through April 30, 1967, and comparisons of acreages recommended by the agencies and citizen groups.

71014 Braun, C.E. The future of public hunting. COLO. OUTD. 16(6): 13-14, Nov.-Dec. 1967.

Rising land values, increased demand for hunting sites, plus a wide disparity between production costs and benefits of wildlife to the landowner are resulting in a decrease of wildlife abundance and private lands for public hunting. Support by conservation agencies, State fish and game departments, and sportsmen, of a small trespass fee to hunt on a private owner's land might alleviate the situation.

71015 Braun, P. A regional refuse-disposal solution. AMER. CITY, 82 (12):96-97, Dec. 1967. Photo.

The township of Sparta, N.J., on the fringe of the New York metropolitan area, has solved its problems of solid waste disposal by developing a regional sanitary landfill. The article relates the community's action prior to acquiring a site and planning criteria used for development.

71016 Breger, G.E. The concept and causes of urban blight. LAND ECON. 43(4):369-376, Nov. 1967. Ref.

Cities, present and past, have ever been a paradox of splendor and squalor. The city has become the site of appalling human misery, disorder, and decay. Historical perspectives are reviewed in this presentation and discussion given to the factors that have contributed to blighted areas. Basic causes fall into the following categories: changing land use and technological change, rising social standards, and the progressive overutilization of property.

71017 Brewer, G.C. FORGING AN ENLIGHTENED PUBLIC LAND USE POLICY FOR THE NATION. Washington, National Forest Products Association, 10p. 1967.

Among the urgent questions which Americans should consider are the encroachments upon our available productive land base and the need for a national land-use plan. This speech presented at the annual meeting, National Forest Products Association, emphasizes these matters and gives the viewpoint of the forest products industry. The forest products industry is being held aloft like Antaeus, a giant in Greek mythology, to suffer harassment and eventual strangulation from preservationist plans. If passed into law, these plans will further reduce the available tree-growing land. The forest products industry opposes all legislation which would reduce the Nation's ability to grow trees and manage them in the public interest.

71018 Brewer, G.C. LAND AND DEMAND; TODAY'S RESOURCE CHALLENGE. Washington, D.C., National Forest Products Association. 15p. 1967.

In this speech before the Public Land Law Review Commission in Seattle the President of U.S. Plywood-Champion Papers, Inc., views with alarm all the encroachments upon the available productive land base in America. Suggested is an evaluation of present public land ownership, with the idea of disposing of those lands which can contribute to our future economic wealth. Essential and nonessential land uses should be identified and assigned on a scale of national interest without regard to individual preferences or individual sociological, economic, recreational or spiritual ambitions. There is need for a national land-use plan and a "more enlightened land use policy."

71019 Bromley, A.W. Conservation education in New York State – the present scope, 5-year plans. CONSERVATIONIST, 22(2):6-8, Oct.-Nov. 1967. Photos., table.

Conservation education is oriented toward an increasingly urban population in New York State. In this article the Director, Division of Conservation Education, explains the work of that Division. It has recently begun a decentralization of conservation education efforts through regional conservation teacher staffing. The Division has assigned first priorities here to the development of school curriculum and the provision of conservation education programs. A table presents the total State conservation education needs – by program and fiscal year – from 1967-68 and projected on for each fiscal year through 1972-73. Besides its own programs, the Division serves to advise, educate and develop public support for the research and managment programs of other divisions of the State Conservation Department. In addition, the Division of Conservation Education tries to instill in the public – by all means and media available – a greater awareness of the natural resources of America as they affect American society today.

71020 Brooks, J.H., Jr. Tactics in Tennessee. Planning two State Parks on man-made waterways. LANDS. ARCHITECT. 57(3):188-192, Apr. 1967. Map, photos.

Man-made lakes form an important recreation resource, but their development involves problems peculiar to the multi-purpose reservoir. Two parks in Tennessee, quite dissimilar in many aspects, reflect the conditions and limitations imposed by the characteristics of the reservoirs on which they are situated. The parks are Rock Island and Panther Creek State Parks.

71021 Brooks, L. The Federal role – The role of government in planning and developing outdoor recreation land – A panel discussion. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, The Conservation Council of Ontario, p. 17-20, 1967.

Federal role in outdoor recreation is primarily in relation to the management of the National Park System. Initiative for greater Federal participation must come from the Provinces. Need for a parallel to the American "Bureau of Outdoor Recreation" having a research and coordinating role is reviewed.

71022 Browder, J. Don't pull the plug on the Everglades. AMER. FOR. 73(9):12-15, 53-55, Sept. 1967. Photos.

The plans of the Central and Southern Florida Flood Control District to construct a drainage and barge canal next to the Everglades National Park were made without consideration for the deleterious effect on the wildlife of the Everglades. The system of dams in Florida cuts off the supply of fresh water to the Park and effects changes in its ecology.

71023 Brunelle, R. The Ontario parks programme. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p. 113-118, 1967.

An education or parks interpretation program has been instituted which is considered vital in the development and operation of the parks system. A new policy of park classification introducing two new types of parks, the primitive and wild river, has been implemented to achieve a balanced park system. In addition, all lands within parks will be zoned for planning development and management purposes. A long-range master plan will be prepared for each park.

71024 Buckinger, M. Forest recreation versus conservation. History, legislation, management and research. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):265-285, 1967. Ref.

This paper traces the historical background of forest recreation versus conservation which led to the present administrative and legal paradoxes. Some of these anomalies are discussed and present status of research in forest recreation is reviewed.

71025 Buckmann, C. The rare and endangered ones. CONSERV. VOLUNT. 30(175):4-10, Sept.-Oct. 1967. Illus., photo.

Causes for decline of wildlife species can be attributed to changing habitat rather than overhunting. Various wildlife species such as grizzly bears, moose, buffalo, and their probable extinction are discussed. Following are the recommendations for wildlife diversity and abundance: public understanding, with support for good wildlife managment, research, and good conservation laws.

71026 Bucknall, E.J. Elk population control. TRAIL TIMBERL. (585):171-175, Sept. 1967. Illus., photos.

A wildlife management ranger from Rocky Mountain National Park discusses the National Park Service's policy and techniques in controlling the elk herds in Yellowstone and Rocky Mountain National Parks.

71027 Bullard, W.E. Forestry applications in water pollution control. J. FOREST. 65(5): 322-325. May 1967.

Forest land provides sources of various kinds of water pollution, most of which can be avoided by management alerted to the hazards. One pollution problem, acid mine drainage, involves forestry in revegetating lands disturbed by mining. The policy position of the Soil Conservation Society of America, which considers the interactions of man and his total environment, including water pollution and its control, is stated.

71028 Burger, D. Research problems concerning forest, fauna, flora, and outdoor recreation in the Netherlands. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):154-182, 1967. Ref., maps.

The forests in the Netherlands occupy about 1/12 of the land area. Forest and agricultural land are fragmented with many strips of transition. This results in a wealth of natural flora and fauna. Outdoor recreation is increasing rapidly. Forest, water bodies, natural areas and recreational areas are intimately interwoven and should be considered as one ecosystem with man also included. Maintaining this ecosystem and developing it in the desired direction pose many problems; the important ones are discussed in this paper. The conclusion is that international testing of research methods and of solutions is desirable. For this purpose, a section within I.U.F.R.O. could do profitable work.

71029 Bury, R.L. Wilderness problems of the U.S. Forest Service. TRENDS PARKS RECREAT. 4(4):25-29, Oct. 1967. Ref., photos.

Management of a wilderness area involves coping with problems relating to an area undisturbed by man. These are discussed as problems pertaining to the resources, the people, and their activities in the wilderness. Academic tools and experience present a fund from which solutions for management problems may be drawn. The institutions and philosophies into which most of the solutions fit can themselves become sources of problems, such as established resource uses which are inconsistent with basic wilderness objectives, legal difficulties, and allocation of policy decisions. The Forest Service wilderness manager has led the way in the resolution of conflicting uses and the criteria of wilderness management.

71030 Bush, M. Burdened acres—the people question. LIV. WILDERN. 31(96/97):28-31, Spring-Summer 1967. Illus.

The great growth rate of the United States population causes a proportionate increase in the demand for the resources. A definite need for preservation of areas in their natural state is indicated if the quality of the environment which, in turn, nutures the human spirit, is to survive.

71031 Cain, S.A. Estuaries: our most endangered natural habitats. Remarks at the Symposium on Marsh and Estuary Management, Louisiana State University, July 19, 1967. U.S. DEPT. OF THE INTERIOR NEWS RELEASE, 10p. July 19, 1967.

By explaining the habitat functions of estuaries, the Assistant Secretary for Fish and Wildlife and Parks, Department of the Interior, explains the habitat functions of estuaries. There are costs as well as benefits in the way estuaries are used without planning. The costs of values foregone when estuaries are polluted beyond their tolerance or are destroyed by dredging and filling, must be reckoned. Pending legislation envisions a national system of preserved estuaries composed of areas under protection of local, State, and Federal jurisdiction. This proposed legislation, a document of inter-departmental understanding between Interior and Army, and the work of the Federal Water Pollution Control Administration will do much to protect estuaries.

71032 Cain, S.A. Interior's goals in the Federal assistance program. TRENDS PARKS RECREAT. 4(3):5-8, July 1967. Photos.

In the early days of settlement of the nation, the pioneers dealt with nature ruthlessly and devastated the natural resources. Growth and progress were materialistic expansion; both seemed necessary and inevitable. The conservation ethic had no place in that culture. Today, such a concept of materialistic expansion is untenable. In contrast America has moved into an era of creative federalism. The Federal Government and the States work together in the wise development and protection of natural resources. A sea-grant program, authorized by the last session of Congress, permits all coastal States to have a direct stake in aquatic and subaquatic resources. Other programs, such as the Pittman-Robertson and Dingell-Johnson have had decades of Federal-State cooperation. Disharmony in nature arises when activities in natural areas are unrelated to nature and should be engaged in where nature is no longer in a pristine state. Overuse of the resources also violates nature. The Interior's goal in the Federal assistance program is to work constructively with the States.

71033 Cain, S.A. A new, needed, and viable concept. Remarks at the convocation on environmental studies and planning, Williams College, Williamstown, Mass., Oct. 8, 1967. U.S. DEPT. OF THE INTERIOR NEWS RELEASE, 8p. Oct. 9, 1967.

Among all of the recognized conservation needs, the need for creative catalysts is one of the greatest. The facts amassed from the various specialized areas of learning do not always add up to a very useful understanding of our total environment and its interdependent parts. The new Center for Environmental Studies and Planning can serve in numerous ways. It can become the focal point for cooperative efforts by schools and colleges of the region. The Center can develop, too, as a facility for analysis and discussion of public policy affecting the environment. This kind of regional forum is needed. Citizens generally need technical help and guidance and the Center for Environmental Studies and Planning can serve as an information clearing-house for citizens' groups and local governments struggling with problems of resource use and planning. The academic concern of the Center will range from ecology to studies bearing directly on human experience.

71034 California. Dept. of Parks and Recreation. OUTDOOR RECREATION OUTLOOK TO 1980. SAN DIEGO METROPOLITAN AREA. Sacramento, Calif. 66p. 1967. Ref., map, illus., photos, tables. (Its Planning Monograph No. 4).

This is a report on outdoor recreation opportunities available to residents in the San Diego metropolitan area through 1980. Population distribution, recreation location, income, demand, and other factors with a direct bearing on the evaluation of the supply of outdoor recreation opportunities, are considered. Data on these factors appear in the appendix as well as a list of definitions of outdoor recreation activities.

71035 California. Legislature. Assembly. Committee on Natural Resources, Planning, and Public Works. CONFLICT IN THE REDWOODS. Sacramento, Calif. 50p. 1967. Ref., maps, photos. (Assembly Committee Reports – Part I. 1964-67).

Information about the huge, aged redwood trees of the California coastal region is provided in this report. Various proposals for a Redwoods National Park are listed chronologically with brief explanations. The two major Committee recommendations are to have a comprehensive assessment of the short-range and long-range economic future of the entire north coast region, and secondly, the prompt creation of a Redwood National Park in the Redwood Creek area of Humboldt County, California.

71036 Carlton, J., O'Brien, W.J. Fees, concessions mean pool profits. SWIM. POOL AGE, 41(6):24-25, June 1967. Table.

Copperas Cove, Texas, with its first recreation facility learned how to gain annual profits through entry fees, a concession contract, and swim lessons. Included is a statement of receipts and expenditures.

71037 Carter, L.J. Dams and wild rivers: looking beyond the pork barrel. SCIENCE, 158(3798):233-236, 241-242, Oct. 13, 1967. Illus., photos.

The concept of dam building has changed since the 1930's when the

Corps of Engineers, the nation's largest water development agency, conceived its role as the agency to prevent floods, produce power and open rivers to navigation, and support economic development. Today the old ways of thinking and operation are not being abandoned rapidly. The Corps still holds to its traditional bias to meet water needs by building dams and other structures. In addition, the traditional approach is supported by the "pork barrel" philosophy of many Congressmen who dispense water projects for their constituents. This results in a heterogeneous approach to building dams and navigation projects often without priorities or assessment of national or regional needs. As a result, many marginal projects, some destructive of valuable natural areas, will be constructed. Specific projects, namely Potomac Basin, Rampart Dam, and Salem Church on the Rappahannock are discussed. The proposals of the Corps, the Bureau of Reclamation, and the Bureau of Outdoor Recreation are analyzed and, in each case, refuted.

71038 Castle, E.N. ECONOMIC AND ADMINISTRATIVE PROBLEMS OF WATER POLLUTION. Corvallis, Oregon State Univ. 19p. 1967. Ref., maps, illus., tables.

Discussed in this paper are the economic nature of the pollution problem, extra-market value and economic evaluation, institutional and administrative considerations, and an empirical and institutional analysis of a case study situation. Some conclusions provided in the summary are: (1) that the Oregon study reported here that tools exist for quantifying recreational and secondary benefits; (2) that if adequate institutional arrangements could be developed, communities could have more flexibility in the allocation of both costs and benefits of water quality, and, (3) that studies of the design and development of social organizations for the solution of pollution problems should be a high-priority research area for the future.

71039 Castro, N. Beautification. TRENDS PARKS RECREAT. 4(2):5-7, Apr. 1967. Photos.

Although there is wanton destruction and pollution of this country's natural resources, many efforts have been made to promote conservation and beautification. Recent Congresses have passed several acts which are enumerated to this end. In this address to nurserymen, the author urges them to advertise more and promote gardening as a vocation as well as avocation.

71040 Caulfield, H.P., Jr. Partnership in comprehensive river basin planning. AMER. WAT. WORKS ASSO. J. 59(10):1222, Oct. 1967.

Comprehensive river basin planning is needed to assure development of water resources most efficiently to meet the requirements of a growing population. This article reviews the function of water planning agencies and their interrelationship on all levels of governments.

71041 Chapman, C.W. Soil and America's future. J. SOIL WAT. CONSERV. 22(5):178-179, Sept.-Oct. 1967.

The objectives and goals of the Soil Conservation Society of America are defined and the history of the conservation movement in relation to changing times and attitudes is briefly discussed. The need for more knowledge in soil conservation is stressed.

71042 Cheatum, E.L. Wildlife resources – what of tomorrow? CONSERVATIONIST, 2(22):12-13, 34, Oct.-Nov. 1967. Illus., photos.

The future of man is closely bound to the natural environment for man cannot exist without other species of plants and animals. Therefore, man must plan for the preservation of these species to ensure his own future.

71043 Clarke, B.C., Davis, J. Staff management and morale. CAMP. MAG. 39(5):10-11, May 1967. Photo.

Values of a camp program as expressed in good leadership and fine staffing are discussed. The staff member must be recognized as an individual. Basic principles for directors include the force of example, praise, and the encouragement of initiative. Indices of good camp morale are: good housekeeping, pride, friendliness and courtesy, enthusiasm, absence of gripes.

71044 Clarke, F.E. What do we really know about stream quality criteria and standards? National Meeting on Water Quality Criteria, 1st, Philadelphia, 1966. WATER QUALITY CRITERIA. Philadelphia, American Society for Testing and Materials, p.100-111, 1967. Ref., tables. (ASTM Special Technical Publication No. 416).

The aim of quality standards for streams is to insure maximum practical use of water for all intended users. The setting of stream quality standards is hindered by lack of information about the effects of many pollutants and the inability to make accurate analysis for certain water compounds. Under these circumstances the proper approach is to accept arbitrary limits while at the same time performing the data collection and research needed to put standardization on a firmer basis. TD370 N3 1966

71045 Clawson, M. Address. In: American Camping Association. OUTDOOR RECREATION – CAMPING. Martinsville, Ind. p.33-38, 1967.

Four factors behind the growing demand for outdoor recreation in general and camping in particular are: more income, more leisure, more people, and better transportation. In the case of camping, there is another factor: a change of taste on the part of the public. The economics of camping and specific recommendations to those in the business of managing campgrounds are presented.

71046 Clawson, M. THE FEDERAL LANDS SINCE 1956. RECENT TRENDS IN USE AND MANAGEMENT. Washington, Resources for the Future. 113p. 1967. Tables.

This supplement to The Federal Lands: Their Use and Management, first published in 1957, not only updates the data of the original volume, but analyzes the earlier book's predictions in the light of developments during the intervening nine years, with particular regard to use, receipts, and expenditures. The appendix contains data relating to national forests, national parks, and other areas administered by the National Park Service, wildlife refuges, grazing districts, other public domain lands, and summary data for all Federal lands. HD216 R42

71047 Clawson, M. State governments and outdoor recreation. STATE GOVERN. 40(4):216-223, Autumn 1967.

An increased number of Americans are turning to the outdoors for various kinds of recreation activity. This article relates the resulting State tasks to those of other governmental levels and the private sector, and highlights some State programs. The States' opportunity to lead among different governmental levels in the cooperative planning of outdoor recreation is emphasized.

71048 Clay, J.A. Clean up the Hudson. AMER. FOR. 73(6):12-15, June 1967. Photos.

A pure-waters program to take effect by 1970 will induce industrial and community cooperation in pollution abatement. The clean-up program, initiated along the Hudson River by Governor Rockefeller, consists of four provisions for the interested parties.

71049 Clean-sea code. PARKS RECREAT. 2(11):37-38, Nov. 1967. Illus.

Standard Oil of New Jersey has developed new methods of separating oil from the ballast water on tanker ships. This is part of the Company's program to keep the world's oceans and beaches free of oil.

71050 Clepper, H. Conservation's grand lodge. AMER. FOR. 72(10):22-27, 58-61, Oct. 1967. Photos.

The article discusses the organization of the Natural Resources Council of America, its membership qualifications, objectives, policies and services.

71051 Cliff, E.P. Trees victims of air pollutants. CONSERV. CAT. 2(2): 4-6, Dec. 1967. Photos.

Air pollution has an adverse effect on the growth of trees. Pollutants tend to retard the growth of trees and eventually cause death. Presently scientists are working on the development of a pine tree that is resistent to the effects of air pollutants. Examples of damage to trees in several regions of the nation are cited.

71052 Club restores ancient Indian mounds. NAT. GARD. 38(9-10):16-17, Sept.-Oct. 1967. Photos.

With the help of various garden clubs in the Sheboygan, Wisconsin area, the burial mounds of the Effigy Mound Indians were saved from a developer's bulldozer. The clubs formed the Indian Mounds Holding Association and purchased the land before it was turned into a subdivision. The restoration was handled by an archaeologist and the site will be developed into a 15-acre park for nature lovers and those interested in Indian lore.

71053 Colman, W.G. Meeting park and recreational needs through intergovernmental cooperation. TRENDS PARKS RECREAT. 4(3):9-12, July 1967. Photos.

In this age of increasing technological and social complexity, the park and recreation programs have not escaped difficulties. It is not easy to coordinate 70 programs administered by 12 agencies. From 1945-64, the postwar era saw an increase in Federal Government attention to the problem of providing adequate outdoor recreation. Within recent years greater attention was directed toward existing Federal land and water resources for multiple purposes in which recreation was included, and on coordinating the development of outdoor recreation on all levels. With the creation in 1962 of the Bureau of Outdoor Recreation and the Land and Water Conservation Fund in 1964, the nation had a central recreation planning agency and a way of financing the acquisition of more land for recreation purposes. There needs to be an effective partnership effort of local, State and Federal Governments. Local governments are limited in jurisdiction and financial resources. The Federal and State Government, remote from the scene, cannot administer programs efficiently at the local level. Accomplishments of local and State governments in applying recreation opportunities are presented. Much needs to be done to improve administration of intergovernmental programs. The Advisory Commission on Intergovernmental Relations published an annual State Legislative Program which makes recommendations to the legislatures on legislation which would help to modernize the local governments.

71054 Colorado's State Park System. COLO. OUTD. 16(3):8-9, May-June, 1967. Map, table.

This article provides a table of Colorado State Parks, with location, facilities and activities. Twenty-four of the 32 parks require a sticker for which a fee is charged. Licenses are required for fishing in any park in the State.

71055 Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, 1967.

"A Conference to present the issues influencing the use of land for recreation at all levels, and to examine the present position in Outdoor Recreation in Ontario." Abstracts for individual papers appear under the author's name.

71056 Connelly, B.J. Our water safety challenge. CONSERV. VOLUNT. 30(173):42-47, May-June 1967. Photo., table.

There is need for a broader-based program of water safety education in Minnesota as a result of an expanding recreational use of water areas. Data on Minnesota water facilities from 1944-1966 indicate the importance of youth training programs in boat handling as well as enforcement of boat and water safety laws.

71057 Conrad, A.C. Historic preservation not a new field for government in Hawaii. HONOLULU, 2(3):34-36, Sept. 1967. Photos.

The Territorial Government of Hawaii as early as 1915 took action to preserve "Hanaiakamalama," a summer palace of Queen Emma, one of the 19th century rulers of Hawaii. The Territorial legislature appropriated funds for acquisition and authorized a private group, the Daughters of Hawaii, to maintain several of these royal palaces and grounds. In 1967 the State legislature passed an "Act relating to the establishment of a State program of historic preservation and restoration." The responsibility for all State preservation projects was assigned to the Dept. of Land and Natural Resources.

71058 Conservancy wins national honors as "Conservation Organization of the Year" for 1966; Udall, Freeman present award. WAT. LAND LIFE, 9(1): 3-4, Apr. 1967. Photo.

In the second annual National Achievement Program sponsored by the National Wildlife Federation and the Sears-Roebuck Foundation, Western Pennsylvania Conservancy was named the "Conservation Organization of the Year." Its award – a Whooping Crane statuette and one-thousand dollar honorarium – was presented during the President's Conservation Achievement Program in Washington, D. C., on January 24, 1967. Other distinguished conservationists were cited for outstanding service to the conservation cause.

71059 Conservation Centennial Symposium. THE QUEST FOR QUALITY IN WISCONSIN. Madison, Univ. of Wis., Conservation Education Programs. 88p. 1967.

Although 100 years had passed since the Forestry Commission of Wisconsin published its landmark report entitled, The Disastrous Effects of the Destruction of Forest Trees in Wisconsin, some conservation problems still remain and new dimensions have been added. The State convened the "Conservation Centennial Symposium" to commemorate the century of progress in conservation. The program was divided into 3 sessions which covered the past, the present, and projections for the future. The purpose of this Symposium was to spur the citizens of Wisconsin to greater achievements in conservation to sustain quality in the environment of the State.

71060 Conservation education center is big Land-Between-the-Lakes attraction. TENN. CONSERVAT. 33(4):6-9, Apr. 1967. Photos.

The Land-Between-the-Lakes offers courses at a Conservation Education Center for pupils from Middle Tennessee State University. The center includes a Youth Activities Station, nature trails, a visitor reception center, and several points of natural and historical interest. Most features, including an Adult Activities Station and an Educational Farm, are scheduled for development in the near future. The program is described.

71061 Conservation Foundation. THE COLLEGE, THE COMMUNITY AND CONSERVATION. Washington, D. C. 97p. 1967. Ref.

This is a summarized report of a conference on "The College, The Community and Conservation." The first panel and discussion group stressed the critical influences in environmental decision-making – local government, private enterprise, and effective citizens. The second panel explored public agency help – from community leaders, business and professional groups, national organizations, colleges and universities. A general discussion followed the presentations of the two panels.

71062 Conservation fund on primary ballot. WAT. LAND LIFE, 9(1):19, 23, Apr. 1967.

Pennsylvania votes on a vital conservation amendment in the May 16 primary election. The issue is a five-hundred-million-dollar Land and Water Conservation and Reclamation Fund which would make possible protection of natural resources; restoration of the State's wasted land areas and contaminated streams, and major improvement of recreational facilities.

71063 Crafts, E.C. Natural beauty –

the new focus on quality. TRENDS PARKS RECREAT. 4(2):1-2, 23-24, Apr. 1967. Photos.

The author, who is the Director of the Bureau of Outdoor Recreation, as well as Executive Director of the President's Council on Recreation and Natural Beauty, reports on the Council's activities, include the review of plans of Federal agencies, the direction of Federal studies of natural beauty and conservation problems, and the preparation of a comprehensive "Report to the Nation on Natural Beauty." The Council is concerned with national policy. Its objectives are discussed.

71064 Craig, J.B. Alarm sounded on a new Redwood Park proposal. AMER. FOR. 73(11):7, 70, Nov. 1967.

Conservationists express concern over the controversial issue of trading national forest land to private timber companies in exchange for State park land.

71065 Craig, J.B. A place in the sun. AMER. FOR. 73(8):10-13, 41-42, Aug. 1967. Photos.

The article analyzes the past and present functions of the Bureau of Land Management. In an interview, Director Rasmussen interprets the multiple use management, administration and legislative problems which confront the Bureau.

71066 Cross, F.L., Jr., Ross, R. Fight air pollution before it starts. AMER. CITY, 82(9):101-103, Sept. 1967. Photos., table.

To fight air pollution before it starts, Manatee County, Fla. has set up a pollution control commission. This article describes and states a brief history of that department.

71067 Croxton, J.C. Crusading to save a valued park. NAT. GARD. 38(11-12):36-39, Nov.-Dec. 1967.

This article is a summary of the fight to save Shaker Park in Cleveland from becoming a freeway. Action included a letter writing campaign to State, Federal and local government officials and application for Natural History Landmark status with subsequent referral to the Advisory Board on National Landmarks. Help was received from various garden clubs, conservation societies, and educators.

71068 Cumberland, J.H. Economic development and its long-run environmental implications. NAT. PARKS MAG. 41(242):11-13, Nov. 1967. Photos.

New technology, greater industrial development, and an increasing population are some of the factors involved in environmental quality, which is really in a deplorable state of deterioration. Advanced planning of the location and structure of industrial and urban complexes for minimum damage to the global environment will be essential. Society will be concerned with the qualitative aspects of economic development in relation to the environment. More sophisticated economic analysis, improved technology and extensive modification of the legal, political, and other institutions will be needed to protect and improve the human environment.

71069 Currier, I. A family affair for four generations. Devil Island. DOWN EAST, 13(9):58-60, 64-67, June 1967. Map, photos.

Devil Island in East Penobscot Bay has belonged to the Frazier Family since 1899. The descendents of William West Frazier, who purchased this island at the turn of the century, formed a corporation, the Devil Island Company, which maintains the 90 acres of beach, field and forest and granite slopes which comprise the Island. The activities of the youth in maintenance of the cottages and facilities are described.

71070 Currier, S.R. Our people and their cities. WEST. CITY, 43(1):15, 36, Jan. 1967.

The challenge of the crises in American cities calls for greatness in action. Such crises as the clogged transportation with which commuters cope every morning, the poverty and the slum housing problems that afflict city dwellers, adequate water supply, and air and water pollution need to be solved today so that the cities the children know will be greater, better and more beautiful.

71071 Davis, A.A. SCENIC EASEMENTS AND CITY LIFE. Address Before the Real Property Committee of the Federal Bar Association, San Francisco, California, July 28, 1967. Washington, D. C. 15p. 1967.

The author, the Director of the Land and Facilities Development Administration of HUD, emphasized the need for better land acquisition strategy to gain public areas for urban America. The public benefits from acquiring public rights in land include: (1) cost efficiency – paying for what is used; (2) flexibility – buying only what is needed; and (3) meeting local fiscal requirements – keeping land on the tax rolls and essentially in private hands. Zoning for urban land use control is a useful and long-standing device used by local governments. Many States are now studying or already using some form of areawide and Statewide zoning to protect certain land areas and values. Zoning does have limitations. Scenic easements, development rights, and leases hold more promise. The less-than-fee-simple techniques offer wider choices for local officials, keep opportunities open, and provide the tools for making sound investments. To encourage the use of these techniques the Dept. of Housing and Urban Development gives priority to applications which propose use of them.

71072 Davis, J. The Redwoods: old cliches and new confusions. AMER. FOR. 73(8):32-33, 40, Aug. 1967.

The article recommends the dissuasion of commercial enterprise and the preservation of the redwood trees in the (proposed) Redwood National Park.

71073 Davis, R. Lighting, Rio Camuy Cave. NAT. SPELEOL. SOC. BULL. 29 (2):46-53, Apr. 1967. Map, illus., photos.

A designer of lighting systems for tourist caves provides guidelines for lighting the Rio Camuy Cave. Those features of the cave which should receive the greatest emphasis are considered and recommendations are presented. In addition, installation procedures and charts for the lighting layout are given.

71074 Delano, S.C.L. (Mrs.) The international park movement. GARD. CLUB AMER. BULL. 55(5):57-58, Sept. 1967.

Many countries have become aware of the need for National parks, as there is a rising interest in the preservation of their national heritages as well as in the economic value of tourism. The United States with 50 years expertise in park planning has been asked for assistance. National Park Service teams of planning specialists, financed by foreign aid programs, foundation funds, or foreign governments, have been in operation on nearly all continents.

71075 Den Dooven, K.C. Water! WEST. GATE. 7(1):20-23, 56, 64-65, 71, Winter 1967. Maps, illus.

Water supplies and water needs seldom occur in the same place, especially in the arid Southwest. Plans to obtain and redistribute water cause heated, distracting conflict, yet the right answer must be found. In this article the publisher of Western Gateways provides his evaluation of the problem, the controversy within it, and ways of heading the matter toward a long-range solution.

71076 Dillon, B. A helping hand for the Torrey Pine. NAT. PARKS MAG. 41(240):16-17, Sept. 1967. Map, photo.

Efforts to promote the preservation of the Torrey Pine, unique to the California coast, are made by the Council for the Extension of the Torrey Pines Reserve, local groups and the State. The last remaining unprotected stands of this tree consist of approximately 214 acres adjoining California's Torrey Pines State Park. Although the State Park is filled to capacity in summer months, the proposed addition of 214 acres would be preserved in its natural state with the exception of construction of a Nature Study Center to be used by students, and the development of nature trails.

71077 Di Luzio, F.C. Facts and myths of water pollution. Remarks before the Governors' Conference on Air and Water Pollution, Denver, Colo., Nov. 27, 1967. U.S. DEPT. OF THE INTERIOR NEWS RELEASE, 11p. Nov. 27, 1967.

Using first the statement of myth, then the statement of fact as a method of presentation, this speech sets the record straight on eleven different facets of the water pollution problem. In addition, the basic facts and principles germane to all anti-pollution efforts – whether Federal, State, or local – are presented as a National Water Resources Policy along with the recommended actions for clean water.

71078 Di Luzio, F.C. The implementation of Federal water quality standards. Remarks before the Chicago Chapter of the Federal Bar Association, Chicago, Ill., Apr. 11, 1967. U.S. DEPT. OF THE INTERIOR NEWS RELEASE, 10p. Apr. 12, 1967.

This speech discussed water quality standards as tools for pollution control. The problems in setting and implementing these standards are explained. Once the States have set their water quality standards, a violation can cause a Federal action. Water quality standards are essentially goals within reach and also to be raised over a period of time. In addition to good laws and public understanding, effective pollution control requires good intentions, action, organization, and financial support.

71079 Di Luzio, F.C. Issues and problems in water pollution control. A view from FWPCA. WAT. WASTES. ENG. 4(5):92-95, May 1967.

The Federal Water Pollution Act of 1966 provides a means of meeting a wide range of water pollution problems. This article examines the organization of National, State and local programs of river basin development, and offers suggestions relating to water quality standards, construction grants, manpower needs, and research.

71080 Di Luzio, F.C. Policies and actions for water quality. Remarks before the Federation of Fly Fishermen, Moran, Wyo., Sept. 2, 1967. U.S. DEPT. OF THE INTERIOR NEWS RELEASE, 7p. Sept. 3, 1967.

Assistant Secretary of the Interior suggests ways to promote better water quality. A deleterious effect of industrial expansion has been an increase of water pollution in American streams, rivers, brooks and estuaries. Americans need to promote economic growth and at the same time to protect the quality of our fishing streams. Steps taken by the Federal government to control water pollution and develop a national water resource policy are outlined.

71081 Di Luzio, F.C. A strategy for clean water. Remarks to the American Society of Civil Engineers, New York, N.Y., Oct. 16, 1967. U.S. DEPT. OF THE INTERIOR NEWS RELEASE, 12p. Oct. 16, 1967.

This speech contains some recommendations on the abatement and control of water pollution. A systems analysis for the Delaware River Basin used as an example must include (1) alternative goals, (2) the means of achieving goals in specific terms – dollars, manpower facilities, time, organization, laws; and (3) the complete costs, benefits and effects of choosing particular goals and means.

71082 Di Matteo, L.P., Stewart, P.E. Prepare to go 100% underground. AMER. CITY, 82(10):62, 64, 66, Oct. 1967. Table.

Because of lower prices, underground electrical wiring will serve 50% of American homes by 1970. This will have the effect of preserving natural beauty. This article discusses various means of installation.

71083 Dominy, F.E. Operation of Bureau of Reclamation reservoirs for maximum recreational and fishing benefits consistent with other reservoir purposes. Remarks at the National Reservoir Symposium of the American Fisheries Society in Athens, Ga., Apr. 5, 1967. U.S. DEPT. OF THE INTERIOR NEWS RELEASE, 10p. Apr. 5, 1967.

The earliest facilities built by the Bureau of Reclamation also attracted visitors who came to look at the scenery and the manmade installations as well as to fish and enjoy other water-oriented sports in the newly created lakes. Modern dam builders recognize that the natural beauty and recreation their works provide are quite as important as the food, fiber, irrigation, and electric energy which the dams, reservoirs, and distribution systems supply. Since 1949, recreation, fish and wildlife conservation have been major Reclamation project purposes.

This speech gives examples of a number of these multi-purpose water resource developments throughout the Nation.

71084 Dotzenko, A.D., Papamichos, N. T., Romine, D.S. Effect of recreational use on soil and moisture conditions in Rocky Mountain National Park. J. SOIL WAT. CONSERV. 22(5):196-197, Sept.-Oct. 1967. Ref., tables.

The authors conducted studies in three Rocky Mountain National Park campgrounds where intensive use of outdoor recreation areas altered the soil characteristics. Thirty-nine sites, respectively, were sampled in Aspenglen campground, Glacier Basin campground and Timber Creek campground, to determine the effects of recreational use on soil compaction, soil organic matter, and soil moisture. The findings recommended more research for the promotion of useful guidelines in locating, developing and rehabilitating heavily used recreation areas.

71085 Duerr, W.A. The changing shape of forest resources management. J. FOREST. 65(8):526-529, Aug. 1967.

The author predicts forest resource management from 10 to 70 years in the future. The areas of significant change that he foresees are: growth in economic and social development; technological improvement; labor productivity; processing of raw materials; automation; centralization of decision making; increasing uncertainty as knowledge in resource management grows; greater reliance on faith; quality importance; shift in forest product mix; focus on the consumer; and multiple-use land management rather than multiple-use land managers.

71086 Dworsky, L.B. Analysis of Federal water pollution control legislation, 1958-1966. AMER. WAT. WORKS ASS. J. 59(6):651-668, June 1967. Ref.

Water pollution control legislation is dynamic. Since 1948 there have been numerous legislative amendments passed by the Congress. This article presents a history of the legislation that has contributed to the national policy on water pollution.

71087 Eadie, J.R. Eufaula Wildlife Refuge embraces 11,160 acres to aid game and fish. ALA. CONSERV. 37(3): 24-26, May-June 1967. Photos.

This National Wildlife Refuge on the Walter F. George Reservoir has enhanced the local economy and has promoted the preservation and increase of waterfowl population through cooperative Federal development and management. Thirteen conservation objectives of the Refuge are listed.

71088 Eckbo, G. Building beauty into recreation master plans. TRENDS PARKS RECREAT. 4(4):21-24, Oct. 1967. Photos.

This is a philosophical essay on the relationship between beauty and recreation. In building beauty into master plans the architect must make a careful study, recognize that all design produces qualitative results, recognize that environment is one continuous experience in space and time, recognize that the quality of the physical landscape is the result of the relation between manmade and natural elements, and recognize that programming must work with graphic physical design. The designer's function is both to follow and lead the public, and to produce things that have never existed previously. Park and recreation design is the most standardized area of design in the country today.

71089 Edison, T.M. The Great Swamp of New Jersey. Jetports and progress. NAT. PARKS MAG. 41(236):18, May 1967.

Since the Great Swamp of New Jersey is being viewed as a jetport, the author voices public concern at hearings held by the Fish and Wildlife Service about a philosophy which conservationists call the perpetual growth mania. Continuous economic development and progress advocated by the politicians and business leaders will ruin the remaining rural and natural areas.

71090 Ekola, G.C. THE CHRISTIAN ENCOUNTERS TOWN AND COUNTRY AMERICA. St. Louis, Concordia Publishing House. 123p. 1967. Ref., illus., tables.

In all States, the cities and the countryside have basic concerns and problems in common. Land and space suffer under the pressure of increased demand. The pollution of land, water, and air by industry, farm, and community use is forcing appraisal anew of our resource-use policies and practices. The resources of town and country are necessary to people in cities, suburbs, and countryside alike. Outdoor recreation contributes to the well-being of all residents of the Nation. Confronted by the nature and scope of society today, people of both urban and rural areas need to become informed about the economic and social issues in both settings. Town and country problems cannot be met nor potentials fully realized by town and country people alone. Urban problems and potentials are also larger than the urban situation itself. This is why urban, town and country residents all have a common stewardship of the outdoor recreation resources in their own localities and on a national scale.

71091 Evans, B. Lowland forest trails. A crisis in preservation. WEST. OUTD. QUART. 34(3):4-6, Summer 1967.

Conservationists recommend a buffer corridor between forest trails and logging operations for trail preservation.

71092 Falls, J.B. The importance of nature reserves – Wilderness – A panel discussion. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario. p.101-104, 1967.

Nature reserves, natural or wild areas set aside to preserve certain features contained in them for study, are considered. There is a need to preserve typical landscapes as well as unique elements. Reasons for setting aside a system of nature reserves, dimensions of nature reserves, steps needed for establishment of such a system are all reviewed. Nature reserves are an attempt to safeguard wild things and potential knowledge associated with them for good of mankind now and in the future.

71093 Federation adopts conservation policy regulations. CONSERV. NEWS, 32(7):9, Apr. 1, 1967.

At the 31st annual meeting, the National Wildlife Federation adopted 20 resolutions. Among these were resolutions calling for increased recreational opportunities through the establishment of parks, lakeshores and seashores, scenic rivers, and wilderness, multiple-use management of public lands retained under Federal ownership, and establishment of a Redwood National Park. If power for the Central Arizona project cannot be provided by thermal generation and a dam on the Colorado is necessary, it should be Hualapai (Bridge Canyon) Dam with boundaries of Grand Canyon National Monument adjusted to prevent invasion by the reservoir. At the same time the Monument might be included within the Grand Canyon National Park which would also include the Glen Canyon National Recreation Area.

71094 Fellows, E.S. The views of a professional forester – Wilderness – A panel discussion. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p.95-97, 1967.

There are only two significant demands for wilderness areas, the first advanced by those who want such areas as ecological, botanical, and zoological preserves (reservations), and the second advanced by those who want such areas for personal recreation. The author is opposed to preservation of wilderness areas for recreational purposes but favors preservation for scientific purposes provided that these areas can be made safe by removing threats which they may offer to the forest land.

71095 Henderson, C. Connecticut conservationists lose fight to save park. CONSERV. NEWS, 32(11):5-7, June 1, 1967.

A small group of citizens of Meriden, Connecticut lost in their effort to save Hubbard Park from highway intrusion. The Meriden case is an example of the city beset with urban growth and land use problems, with loss of city park lands and open space through highway development.

71096 Fiske, J.D., Watson, C.E., Coates, P.G. A STUDY OF THE MARINE RESOURCES OF PLEASANT BAY. Boston, Mass. Dept. of Natural Resources. 56p. 1967. Ref., maps, photos. (Massachusetts. Division of Marine Fisheries. Monograph Series No. 5).

This report, an inventory of the marine life in the Pleasant Bay area of Massachusetts during 1965, constitutes the seventh estuary evaluated in the State's estuarine research program. The amount and size of fish and shellfish caught in various parts of the Bay are tabulated. The status of the fishing industry in earlier days is cited for comparison. State laws which regulate fishing in Pleasant Bay and legislation which affects the use of the coastal wetlands are reproduced within the text of the study. The deleterious effects of water pollution on the fish and economic value are considered. Twelve specific recommendations are made to aid in the management and proper utilization of the marine resources of Pleasant Bay.
SH222 M2A32 No. 5

71097 Flack, J.E. Meeting future water requirements through reallocation. AMER. WAT. WORKS ASS. J. 59(11): 1340-1350, Nov. 1967. Ref., tables.

The growing water requirements for agriculture, municipal and industrial uses, necessitates future reallocation of water. The article discusses demands, uses, and economic factors of the water problem.

71098 Flannery, J.J. Economy of water quality management and pollution control. In: Water Symposium, State University of New York at Buffalo, 1966. THE FRESH WATER OF NEW YORK STATE:

ITS CONSERVATION AND USE. Dubuque, Iowa, Wm. C. Brown, p.51-57, 1967.

Considerable thought is given to the conflict between waste disposal and other water uses in the determination of public policy for pollution control. The economics of water pollution and the relationship of costs versus benefits in the improvement of water quality are discussed. Two favorite concepts of economists are analyzed – optimizing and internalizing for pollution control. The more critical and costly aspects of pollution control today are associated with instream uses as opposed to withdrawal uses.

71099 Fleming, R.R. Clean-up and beautification campaigns . . . gain in popularity, involve city officials to a greater extent and show better results than ever before. AMER. CITY, 82(5):105-107, May 1967. Photos.

For their excellent clean-up and beautification achievements, trophies were awarded to 24 cities before selecting the top winner from among them. The top award went to San Antonio, Texas. Five classifications of the winning San Antonio program were: home and community beautification; prevention of slums and rehabilitation of blighted areas; improving health and safety standards; teaching juvenile decency; and fire prevention. Highlights of eleven other beautification campaigns – Philadelphia, Pa., Paramus, N.J., Chattanooga, Tenn., Los Gatos, Calif., Southfield, Mich., Memphis, Tenn., Moriarty, N. Mex., Danville, Va., Muncie, Ind., Bountiful, Utah, and Riverbank, Calif. – are reported in the article.

71100 Flint, G.W. Hobby Lobby. Rockhounds help Government in land classification process. OUR PUB. LANDS, 17(2):20-21, Summer 1967. Photo.

Mineralogical Societies, Inc. in cooperation with the Bureau of Land Management conducted studies in California on overall interest in rockhounding, areas used, visitor-days of use, and impact on economy. This type of information benefits public land management.

71101 Flora, D.F. The total economic impact of forest land withdrawals. In: Washington State Forestry Conference, 46th, Seattle, 1967. PROCEEDINGS. Seattle, p.30-39, 1967. Ref.

For weighing the costs and benefits of forest land withdrawals, there are a variety of economic tools available. The multiplier is one approach; mitigation, another. Their concepts and their applications are explained fully.

71102 Forest Farmers Association. Statement . . . to the Public Land Law Review Commission. FOR. FARM. 26 (12):10-12, Aug. 1967. Tables.

At open hearings in New Orleans on May 27, 1967, the Forest Farmers Association presented its views on matters and policies about the public lands to the Public Land Law Review Commission.

71103 Fowler, K.S. OBSTACLES TO THE RECREATIONAL USE OF PRIVATE FOREST LANDS. Washington, D. C., National Forest Products Association, 89p. 1967. Ref., tables.

The objective of this study is to present a variety of alternative means of response to the outdoor recreation demands. Consideration is given to public and private land acquisition, scenic easements, zoning regulations and regional planning in the development of recreation resources. Discussion is devoted to factors involved in the recreational use of forest lands. User fees, patrol of lands, stronger legislation, public education programs, etc., are recommended actions to lessen the deterrents to the private sector of providing recreation opportunities. Data are given on forest land in the contiguous states, industrial forest land open for public recreation, coverage cost for campground/picnic facilities, and Federal and cooperative technical and financial assistance available to private landowners for recreation development. The status of State liability laws as of January 1967 is reported.

71104 Fox, I.K. Evaluation of investments is water resources management. AMER. WAT. WORKS ASS. J. 59(8):913-918, Aug. 1967.

In evaluating water resources management, review of programs should be left to the public. This article discusses the means of accomplishing and the obstacles impairing the achievement of this end.

71105 Freeman, O.L. Conservation crisis demands personal involvement. CONSERV. CAT. 2(1):1-3, July 1967. Photos.

The Secretary of Agriculture expresses concern for the country's quality of life in the future as population increases. There is need for personal involvement and governmental action. "Conservation is not only a physical task but a social philosophy and an economic necessity."

71106 Freeman, O.L. The new U.S.D.A. recreation policy. TRENDS PARKS RECREAT. 4(3):1-2, 24-25, July 1967. Photos.

The U.S. Dept. of Agriculture has been involved with recreation and conservation for many years, but the 1962 Act, called a Charter for Rural America, greatly expanded the authority to foster recreational development. The 1965 Food and Agriculture Act provided for recreation and wildlife conservation. The Department has put idle acres to work producing recreation or providing cover for wildlife. Other accomplishments of the Department's efforts to promote rural developments are enumerated. The multiple-use concept has been used and encompasses both public and private lands. The difficulties of the imbalance in public lands between the East, where the greatest number of people are, and the West, where most of the public land is located, the money problem and the overriding need of the people for recreation, were the factors considered in the Department's policy. Highlights of the recreation policy are outlined and discussed. The importance of planning on the local level to make recreation a viable, integral part of all development plans must be recognized.

71107 Frey, J.C., Gamble, H.B. Policy issues and problems in outdoor recreation. J. FARM ECON. 49(5):1307-1317, Dec. 1967. Ref., tables.

To achieve a more efficient resource allocation and consumer welfare objectives in outdoor recreation, a market-pricing system must be put into effect. Consumer welfare can be increased by locating recreation centers closer to the centers of population and thus reduce transportation cost. Because of the lack of private capital, there is a continuing need for public involvement in the financing of outdoor recreation.

71108 Fridley, R.W. HISTORIC SITES OF NORTH DAKOTA. A REPORT ON THEIR PRESERVATION, DEVELOPMENT AND INTERPRETATION. Bismarck, N.D., State Historical Society of North Dakota. 49p. 1967. Map, tables.

The policy of developing recreational areas around historic sites is evaluated. For this report, twenty-seven historic sites administered by the State Historical Society, State and Federal jurisdictions, are reviewed. Recommendations for funding, master planning, and establishment of priorities are made. A supplement presents a 10-year program for the protection and use of the historic sites with recommendations for appropriate State legislation.

71109 Fritz, E. The Redwood Park proposals. TREES MAG. 27(6):16-20, Sept.-Oct. 1967. Photos.

Promotional methods employed for the preservation of redwood forests are hurting their conservation. Controversy exists over the administration of the coast redwood parks between the State of California and the Federal government. Floods, lumbering, recreation, and other factors are briefly discussed. In conclusion, the author, professor of forestry emeritus, Univ. of California, suggests the Federal government should appropriate money and acquire property for the preservation of more redwoods and transfer this property to the State of California for administration.

71110 Frome, M. Predators, prejudice and politics. FIELD STREAM, 72(8): 24-26, 28, 30, 32, 98, Dec. 1967. Photos.

Federal predator control has reduced some of the rarest adapted species of wildlife to near extinction. The article discusses the role of the Department of the Interior, the National Forest Service, the National Audubon Society, etc., in the conservation of this natural resource. Suggestions are made for preservation of endangered species.

71111 Gaffney, M. Benefits of farm programs, II. Incidence, shifting, and dissipation. AMER. J. ECON. SOCIOL. 26(4):417-424, Oct. 1967.

If landowners are ruining themselves by too much success, that is not yet apparent in the value of farm land, which keeps rising in the face of falling farm income. What causes this paradoxical behavior? Discussion is given to the factors that have caused farm land to rise in value and how it will possibly affect the future operation of this land market in the short run as well as the longer run.

71112 Gamble, H.B., Sauerlender, O.H., Duzinski, G. SELECTED EFFECTS OF THE HIGHWAY BEAUTIFICATION ACT OF 1965. University Park, Pa., Pennsylvania State University. 125p. 1967. Illus., tables.

Pennsylvania State University, under contract to the Bureau of Public Roads, engaged in a pilot study on certain effects of title II of the Highway Beautification Act of 1965 (control of junkyards). By means of an input-output model of Clinton County, Pennsylvania, the direct and indirect economic effects of junkyards were determined. Data gathering included specific cost, income, and employment data on about 50 junkyards of varying sizes, kinds, and locations – both urban and rural – throughout a six-State area of eastern United States. During the course of the study, the need for expansion was seen. Consequently, impact analyses were expanded to include likely effects on a local community from billboard control and scenic enhancement programs, using the Clinton County model. This report contains detailed findings on all aspects of the research. It is illustrated by numerous tables. TE323.1 G19

71113 Gardner, B.D. Discussion: analytical issues in demand analysis for outdoor recreation. J. FARM ECON. 49(5):1304-1306, Dec. 1967.

The price system should be used in determining the use of outdoor recreation facilities. The consumer will tend to equalize his marginal utility per dollar. The higher the price the less demand there will be, of a smaller marginal utility.

71114 Garmhausen, W.J. Parkway and roadside development. Modern methods of maintenance. PARK MAINTEN. 20 (9):16, 18, Sept. 1967. Photos.

This article deals with new equipment and techniques for roadside maintenance. For the last 25 years the Ohio Dept. of Highways has sponsored the Ohio State Short Course on Roadside Development. New techniques, equipment, and material are presented by demonstration experiments and tests.

71115 Garrison, L. The lady at the Bell. CONSERV. VOLUNT. 30(173):8-12, May-June 1967. Photo.

The significance of historic and national heritage preservation is exemplified in a simple act of worship on the part of an unnamed woman at the Liberty Bell in Philadelphia's Independence Hall. Today there is a real and personal concern for history. This has led to the formation of the National Trust for Historic Preservation. On the national level, the President appointed a 17-member National Historic Preservation Advisory Commission under the authority granted by the recent Historic Preservation Act, P.L. 89-665. The responsibilities of the Commission are briefly outlined, and the Federal and State grants-in-aid program authorized by the Historic Preservation Act are also discussed. The value of a Chief of Interpretations at the Minnesota Department of Conservation to offer attractive and vital presentations of the historic sites throughout the State is presented.

71116 Gavagan, J.E. Policy and power. CONSERVATIONIST, 22(3):1, Dec.-Jan. 1967-68.

The Niagara-Mohawk Power Corporation and the Hudson River Valley Commission disagree on the placement of a high voltage line. The power company wishes to run two more lines above ground, parallel to the existing two. The Commission has disapproved of the plan but has no power of enforcement. If Niagara disregards the Commission, public opinion may be voiced for stronger regulatory powers in the Valley.

71117 Geyer, R.E. Trends in undergraduate education in renewable natural resources. J. FOREST. 65(8): 540-542, Aug. 1967.

The Panel on Natural Resources Science was established in 1965 and serves a purpose of determining desirable changes in the undergraduate education of future scientists, resource managers, and other professional personnel who will be involved with renewable natural resources. Directors of resident instruction in colleges of agriculture, heads of forestry schools and wildlife departments not affiliated with colleges of agriculture, were contacted to determine what significant trends and developments had been taking place. This article reviews these findings and relates programs from colleges and universities throughout the United States.

71118 Gicker, E.B. Hawaii calls . . . Visitors from the mainland. HOT. MOT. MANAGE. 182(11):27-34, Nov. 1967. Map, photo., tables.

Increased air and sea travel draws over one million visitors to Hawaii annually. The tourist industry is the second largest in the country, with an annual contribution of over $300 million. The article describes the Islands, including their activities and accommodations.

71119 Gill, J.N. Connecticut's open space program. J. FOREST. 65(12):873-877, Dec. 1967. Photo.

A review of the developmental background of Connecticut from early colonial days to the present in relation to growth and its effect upon open areas. The program as currently established entails four major segments: a system of grants-in-aid to assist municipalities with the acquisition of land and water for conservation and outdoor recreation; a program for State acquisition of areas of strategic importance in the over-all natural resources plan; a use value assessment law to encourage owners of the several categories of open space land to retain it in its natural state; and an all-out effort to end water pollution as a serious problem in the State.

71120 Glascock, H.R., Jr. Foresters and environmental quality. J. FOREST. 65(6):378-380, June 1967. Ref.

The importance of environmental quality in our social, economic and political life today and its relation to forestry is stressed. The forester needs to expand his responsibilities from tree grower and land manager to environmental manager.

71121 Golze, A.R. Future planning for water resources at the State level. AMER. WAT. WORKS ASS. J. 59(4): 425-433, Apr. 1967. Maps, tables.

The need for proper water resources planning is essential for the growth of a State. This article gives a history of water resources planning in California and the organization and function of the California State Department of Water Resources and its relationship to other units of State government.

71122 Gottmann, J. Water quality

and water consciousness. In: Water Symposium, State University of New York at Buffalo, 1966. THE FRESH WATER OF NEW YORK STATE: ITS CONSERVATION AND USE. Dubuque, Iowa, Wm. C. Brown. p.235-240. 1967.

In a summation of papers presented at the Symposium, Dr. Gottmann concluded that the unequal distribution of population density within New York has concentrated the demand for fresh water, making it hard to organize the supply and to control pollution. Recommendations to meet the needs of a growing population by water resource development include: (1) the disposal of waste, and some regulation to maintain a sufficient natural resource; (2) the reuse of water; (3) evaluation of costs vs. benefits to improve environmental quality; (4) local, State, Federal, interstate, and international cooperation in water resource planning and politics; (5) an adequate staff of trained personnel to encourage research and improve management; (6) laws and regulations; and (7) educating citizens to be "water conscious."
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71123 Gover, W.C. My range use affects salmon and steelhead production. J. RANGE MANAGE. 21(4): 263-265, July 1967. Photo.

The Gover Ranch carries out a program of streambank manipulation and shore protection that maintains suitable spawning grounds for king salmon and steelhead. Estimated values are high. The ranger can be of use in preserving and improving the fish supply for sportsmen.

71124 Graham, F., Jr. Pesticides, politics, and the public. AUDUBON, 69(4):54-62, July-Aug. 1967. Photos.

Dilemmas faced by Federal, State, and local agencies regarding the control of DDT and other pesticides are discussed. The growing public concern over the use of certain pesticides has placed pressure on all levels of government to act; yet a solution is not easily found due to countervailing pressures exerted by agricultural and commercial interests. Case studies from the northeastern States are used to illustrate many of the points of the article.

71125 Graham, F., Jr. What trails for America? AUDUBON, 69(6):46-52, Nov.-Dec. 1967. Map, photos.

The physical value of walking, and the growth in popularity of this sport as an outdoor recreation activity have influenced President Johnson to call for the development and upkeep of a nationwide system of "Trails for Americans." A report by the Bureau of Outdoor Recreation in 1967 recommended the development and maintenance throughout the U.S. of national scenic trails, forest trails, and metropolitan area trails. The need for legislation is stressed to authorize the Federal government to protect a trail's qualities where it passes through privately owned land. The four long hiking trails suggested for immediate inclusion in the national scenic trails are: the Appalachian Trail, the Potomac Heritage Trail, the Continental Divide Trail, and the Pacific Crest Trail. Other proposed routes and trails are briefly described.

71126 Gt. Brit. Natural Resources Technical Committee. Land Use Study Group. REPORT. FORESTRY, AGRICULTURE AND THE MULTIPLE USE OF RURAL LAND. London, H.M. Stat. Off. 110p. 1966. Maps, tables.

The report discusses the relation of forestry and agriculture in the rural economy, and criteria and methods for the improvement of Gt. Britain's self-sufficiency in the products of the land. Among several factors analyzed are: (1) use of methodology in various circumstances; (2) coordination of multiple uses of land; (3) the scientific study of the landscape; (4) the growing demand for recreation; (5) the need for regional planning. Some statistics given include: (1) major land uses; (2) areas of rural lands for public recreation; (3) woodland distribution; (4) urban development. H D591 D3 1966

71127 Green, L., Jr. Energy needs versus environmental pollution: a reconciliation? SCIENCE, 156(3781): 1448-1450, June 16, 1967. Ref.

Analysis of water pollution problems created by processing and burning of fossil-based fuels suggests the possibility of reducing harmful effects of combustion through methods resulting in more complete oxidization.

71128 Grieve, A. Legal aspects of spectator injuries. ATHL. J. 47(8): 74-76, 80, Apr. 1967.

In the administration of athletics, provision for the safety of the spectator should be a major consideration. Several cases of injury to spectators were cited to illustrate the need.

71129 Griggs, G.E. Installation and operation of farm fish raceways. J. SOIL WAT. CONSERV. 22(5):203-204, Sept.-Oct. 1967. Ref., photos.

The author describes the progress in Tennessee in raising warm and cold water fish as cash crops, and discusses facilities and conditions which are necessary for a successful commercial operation. The problems and profits which management may anticipate are presented.

71130 Gurnee, R.H. Proposed development plan for Rio Camuy Cave, Puerto Rico, Surface facilities. NAT. SPELEOL. SOC. BULL. 29(2):40-45, Apr. 1967. Maps, illus., photos.

After a discussion of early surface facilities for commercial caves in general, and of surface facilities in several well-known U. S. caves in particular, the author recommends in this report suggested physical facilities for Rio Camuy Cave. For transportation needs, a narrow-gauge train to the cave entrance and a cable car from the gauge train to the cave entrance and a cable car from the exit are recommended as well as a tentative design for the administration building. The report describes these facilities and such other necessities, as an entrance road, parking lot, paths, walkways, and foot trails with look-out areas.

71131 Gurnee, R.H. The Rio Camuy Cave Project, Puerto Rico. NAT. SPELEOL. SOC. BULL. 29(2):27-32, Apr. 1967. Photos.

The National Speleological Society discovered in Bayaney, P.R., an extensive cave system which is under development for the public. Historical background of Rio Camuy Cave area in particular and the problems of developing caves for tourists in general are reported.

71132 Hackendahl, R.H. Community cleanup – a national need. TRENDS PARKS RECREAT. 4(2):11-17, Apr. 1967. Photos.

The director of the National Clean up – Paint up – Fix Up Bureau discusses the organization's history and objectives. The objectives are: home and community beautification, prevention of slums and rehabilitation of areas blighted, improving health and safety standards, teaching juvenile decency, and supporting fire prevention programs. The Bureau has developed a kit of eight booklets which relate to various topics of civic improvement. Awards are given to the cleanest towns in the national competition which has a growing number of participants annually.

71133 Haider, M.L. The pollution problem. LAMP, 49(1) [i], Spring 1967.

The Chairman of the Board of the Standard Oil Co. of New Jersey calls for coordinated community effort to restore and maintain satisfactory air and water conditions in America. After enumerating causes of pollution, the article reports on progress to abate pollution and actions and expenditures made by business and industry, particularly the petroleum industry. There is need for business and industry to do more to implement pollution abatement programs before government legislation forces action. Recommendations include the steps that municipalities, regional organizations, and the general public should take to control air and water pollution.

71134 Haley, B.K. Corps of Engineers Projects: applauded by Washington State Park System. PARK MAINTEN. 20(10):77-79, Oct. 1967.

The State of Washington has collaborated with the Corps of Engineers in the development of recreation sites. The Corps builds a dam and does the basic recreational development, such as, utilities, roads, boating facilities, and parking areas; then turns the site over to the State Park System on a 25-year lease basis.

71135 Halliday, W.R. Job Corps Center danger to National Park. WEST. OUTD. QUART. 34(1):7-8, Winter 1967.

In a formal resolution to President Johnson and Secretary Udall on Dec. 1, 1966, the National Speleological Society objected to the operation of a Job Corps Center in Mammoth Cave National Park on the grounds that the activities of the Corps are: (1) causing overflow sewage of the cave and polluting the underground stream; (2) resulting in a change in the flow of groundwater in the caves by an extensive water collection system; and (3) are a detriment to the wilderness area.

71136 Hammon, G.A., Mc Donald, J.K. Recreation information management. TRENDS PARKS RECREAT. 4(2):29-32, Apr. 1967. Photo., table.

The Forest Service has initiated a system of recreation information management, called RIM, which provides a current and detailed picture of where and when recreation is occurring in relation to planned capacity

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on the 186 million acres of forest lands the Service manages. RIM also stores information about potential development of wilderness areas, makes detailed descriptions of the areas, and can compare area situations. The system is fully automated and can cope with a wide variety of material.

71137 Hansen, C.G. Bighorn sheep populations of the Desert Game Range. J. WILDL. MANAGE. 31(4): 693-706, Oct. 1967. Ref., maps, tables.

The number of Bighorn sheep in the Desert Game Range of Nevada has been reduced by almost two-thirds in the last fifteen years because of hunters. This article deals with the methodology of making census counts of these sheep.

71138 Hansen, W.R. The lower Black Canyon of the Gunnison. NAT. PARKS MAG. 41(238):14-19, July 1967. Maps, photos.

The lower section of the Black Canyon of the Gunnison River contains a wealth of earth history. The soil and rock formation are of great interest. This section of rarely visited undeveloped public land possesses unusual geologic interest and high recreation potential. The author, a geologist with the Geological Survey, makes two suggestions to assure proper development and protection of the area: (1) extend the boundaries of existing national monument to include the best parts of the adjacent lower canyon; (2) incorporate the area into the State park system and develop it by State, local and private funds.

71139 Hanson, P. A look at new laws. COLO. OUTD. 16(4):4-5, July-Aug. 1967.

A review is given of 1967 Colorado legislation and its effect on game, fish, and parks resources. Briefly discussed are the following areas: license fee increases, recreation landowners liability, authorization of suits due to flood damage, park and recreation area fines, and bird protection laws.

71140 Hard, W.R., Jr. VERMONT LIFE, BOOK OF NATURE. Brattleboro, Vt., Stephen Greene Press. 188p. 1967. Illus., photos.

This book contains a number of articles, drawings, and photographs which appeared in Vermont Life from 1947 to 1967. Since its inception in 1946 this quarterly periodical sponsored by the Vermont Development Department has become one of the well accepted publications on American wildlife. This collection has essays on the fauna and flora of the rugged mountainous New England State by scientists and conservation writers. Its basic theme is conservation. QH105 V7H3

71141 Hartzog, G.B., Jr. The Golden Circle Concept. WEST. GATEW. 7(3): 32-37, 46-49, Summer 1967. Map, photos.

The Director, National Park Service, defines the Golden Circle Concept as encompassing in one region the greatest concentration of scenic wonders found within the country, or, perhaps, in the entire world. The region includes the red-rock country of southern Utah, southwestern Colorado, northeastern New Mexico, and north-central and northeastern Arizona. Detailed description of each National Park Service unit within the Circle is given.

71142 Hartzog, G.B., Jr. Panel: Recreation and resources – the new accommodation. Remarks In: National Reclamation Association. COMPENDIUM, 36th ANNUAL CONVENTION, 1967. Honolulu, p.164-169, 1967.

Man's needs are expanding, but they must be met by the resources that are available. There must be cooperation at all levels in the management of these resources. Conflicting viewpoints between the Park Service and both the Bureau of Reclamation and TVA are cited. This country has been too concerned with the dollar value of projects; as a result, the intangible values have suffered. Projects of the Corps of Engineers, Bureau of Reclamation, and TVA should be achieved without destruction of other values which enhance the quality of the total environment.

71143 Hartzog, G.B., Jr. Remarks at the National Reclamation Association's Annual Convention, Honolulu, Hawaii, Nov. 16, 1967. U.S. DEPT. OF THE INTERIOR NEWS RELEASE. 6p. Nov. 16, 1967.

Following the Conference theme of Recreation and Resources – the New Accommodations, National Park Service Director Hartzog expressed his viewpoints and highlighted some of the issues arising out of program management and the cost-benefit considerations that involve our resource-use alternative choices.

71144 Hattery, G.S. Get out of the dumps . . . and win friends and industry in the process. AMER. CITY, 82(6): 100-101, June 1967. Photos.

With advice from a sanitary landfill specialist from nearby Cleveland, the town of Medina began a sanitary landfill project. Present plans call for the development of a park when the landfill is completed. The Medina landfill is considered a model operation by officials of the Ohio Department of Public Health. This article itemizes the initial costs and maintenance expense as well as the benefits.

71145 Hayes, J. New idea – fishing schools! SPORTFISHING, 4(1):48-49, Aug. 1967. Photo.

The curriculum of a series of fishing schools established by the State of Pennsylvania includes casting techniques, fishing site selection, types of fish and stream improvement.

71146 Heacox, E.F. A call for resource statesmanship. AMER. FOR. 73(8):14-17, 48, Aug. 1967. Photos.

Support is given to multiple use of forest lands, and the recommendation is made for the study and evaluation of natural resources to produce management compatible with technology.

71147 Hella, U.W. "The new perspective." CONSERV. VOLUNT. 30(173): 4-7, May-June 1967. Map, illus.

The virtues of wilderness areas, parks, and the recreation opportunities they provide are described. An increasing urbanization renders park acquisition located within easy access of megalopolis more difficult. To meet the physical and emotional needs, the Minnesota legislature in 1967 concerned itself with the expansion of the river boating system. Included were the Big Fork, Little Fork, St. Croix and the Minnesota

Rivers. The Legislature authorized a pilot development of the Minnesota River and also considered a hiking or snowmobile trail system. The Casey Jones Trail was designated for hiking, horseback riding, cross-country skiing and snowmobiling.

71148 Henderson, G. Are national parks obsolete? In: Conference on Parks and Outdoor Recreation. Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p.133-141, 1967.

A few facets of the National Parks situation in Canada with special reference to Ontario are examined. National Parks policy is compared with that of the provincial parks: ". . . a misconception of the role of National Parks has been the chief reason we do not yet have a National Park in Ontario that we can be really proud of; the misconception being that only by harvesting natural wealth are we using it and that not harvesting it means wasting it. It is reasonable to expect either a definite commitment to have a worthy National Park established in the near future or be told why this is not possible."

71149 Herschend, J. Financial plan. NAT. SPELEOL. SOC. BULL. 29(2):63-65, Apr. 1967. Illus.

The Rio Camuy Cave is an outstanding natural attraction which should be developed. This article explains how it can be financed. To be financially successful, the venture needs the promotional support of the Puerto Rican Government, a good access road from San Juan, and the sound financial backing necessary to develop the cave initially on a large scale.

71150 Hill, H.R. Annual park pass. IND. OUTD. 32(12):8-9, Dec.-Jan. 1967. Photos.

Indiana and its new 10 dollar annual admission pass which became available on Jan. 1, 1968 will admit a non-commercial–type vehicle and all of its occupants to all State recreation areas. Individual admission fees to facilities are discussed.

71151 Hillenbrand, B.F. The second battle of Antietam or the fight to save our parks. PARKS RECREAT. 2 (11):18-19, 52, Nov. 1967.

Interior Secretary Stewart L. Udall denied Potomac Edison's application for Extra High Voltage (EHV) electrical transmission lines across the C&O Canal adjacent to the Antietam National Battlefield. Highlights of the controversy to the date of this article are given. Lack of proper governmental controls on national, State, and county levels is emphasized in this specific case. A plea for citizen help to prevent power development on historic sites and parklands is made.

71152 Hilpert, L.S. SUMMARY REPORT ON THE GEOLOGY AND MINERAL RESOURCES OF THE BEAR RIVER MIGRATORY BIRD REFUGE, BOX ELDER COUNTY, UTAH. Washington, Govt. Print. Off. 10p. 1967. Ref., map, tables. (U. S. Geological Survey. Bulletin 1260-C).

The bulletin is one of a series of reports on wilderness areas proposed for inclusion in the National Wilderness Preservation System. It contains a compilation of geologic information, a review of the geology, location, access, and mineral resources as well as including a map of Bear River Migratory Bird Refuge and the candidate area for the Wilderness System within the Refuge.

71153 Holum, K. Underground transmission – an old idea with growing appeal. TRENDS PARKS RECREAT. 4(4): 12-14, Oct. 1967. Photos.

There has been a new upswing in public interest in placing transmission lines underground. This has resulted in new demands on the power industry, new concern by government, and new action by the industry itself in the form of research. Economic and technical problems must be solved before high voltage lines can be put underground. The public wants heavy, unsightly lines placed underground for the sake of beautification and has exerted pressure to preserve natural beauty. Several recent cases of the citizen vs. the power industry are reported.

71154 Hope, J. The park. NATUR. HIST. 76(7):8-10, 12, 14, 16, Aug.-Sept. 1967. Illus., photos.

In a fictitious story involving a walk in New York's Central Park, the author presents an account of the continual attempts of man to convert the park into facilities designed to support specialized use. Arguments are presented which support the maintenance of the status quo within the boundaries of the park.

71155 Houser, J. Legalize your boat. TEX. PARKS WILDL. 25(6):24-26, June 1967. Photos.

Safety requirements for boats and water sports in Texas are discussed.

71156 How to plan a litter cleanup. SUNSET, 138(5):160, 162, May 1967.

A beautification group called Desert Beautiful in the Coachella Valley of Southern California has conducted successful cleanup projects. Strategy and technique are described.

71157 Hunhart, J. Design, maintenance, created Huron's memorial park from swamp. PARK MAINTEN. 20(8):14, Aug. 1967. Map.

Existing facilities and new ones proposed for development at Huron's memorial park, created 400 feet above the municipal dam from swampland on the banks of the James River, are described.

71158 Hursthouse, P. Watch out for these hazards. AMER. CYCL. 6(4):15, June 1967. Photo.

Storm drain covers with grids running parallel to the curb are a serious hazard to cyclists. The covers in Oak Park, Illinois, for one example, can be turned until the grids run at right angles to the curb. However, cars drive over these covers, which gradually rotate around to a parallel position again. The article describes and cites examples of several kinds of hazardous drain covers. Communities are liable in case of accident, once they have been legally notified of the danger and do nothing to correct it. The League of American Wheelmen is interested in how communities are handling this problem.

71159 Indiana University. Water Resources Research Center. WATER GEOLOGY

AND THE FUTURE. Bloomington, Indiana Univ. 117p. 1967. Ref., photos., tables.

At a conference convened by Indiana University at the dedication of a new building for the Geology Dept. and Indiana Geological Survey, scientists, social scientists, and engineers discussed the current status of water research – in fisheries, water quality, recreation, economics, hydrology, and ground water geology. The need for future water research and trained professionals was emphasized. Consideration was given to water use, water management and control of water resources.

71160 International Clean Air Congress, 1st, London, 1966. PROCEEDINGS: Part I. London, England, National Society for Clean Air. 292p. 1966. Ref., maps, photos.

This volume contains all the papers received for presentation at the first International Clean Air Congress. The deliberations of Sessions II-VIII of the Congress include a world review of pollution on six continents. A report of Session I covers the opening of the Congress. The sessional reports of the rapporteurs, with discussions and author replies, form Part II. TD881 I66 1966

71161 Isenberg, R.M. Education comes alive outdoors! NEA J. 56(4):34-35, Apr. 1967. Photo.

The values of outdoor education as part of regular school programs are discussed. Outdoor education is an effective teaching method. The rich resources of nature and outdoor activities can apply to all levels in all subject matter areas. Children learn more quickly in an outdoor setting and retain what they learn longer. Some communities are providing outdoor experiences as part of the local Head Start program. Outdoor education has been part of the school program in Los Angeles, Riverside, and San Diego Counties and in other counties and cities of California for nearly 20 years. Individual school systems in New Jersey, Maryland, Ohio, Michigan, Illinois, Wisconsin, Washington, and Oregon for at least that long have had programs in operation with satisfactory results.

71162 Jack, N.C. Grand Canyon: Dead or alive? BET. CAMP. 8(9):34-37, Nov.-Dec. 1967. Photos., table.

A member of a Sierra Club-sponsored trip confirms recognition of the threat of more dams to the Colorado River and the Grand Canyon. Conservationists urge the extension of the Grand Canyon National Park boundaries and the preservation of the scenic beauty, vegetation, and wildlife of this national asset. The article includes a list of camping equipment for a river expedition and commercial operators to contact for boat or hiking trips through the Grand Canyon.

71163 Jackson, G.F. The future of state parks. TRENDS PARKS RECREAT. 4(4):1-2, 19-20, Oct. 1967. Photos.

State park directors are in a position to lead and coordinate the widespread scope of recreation activities by the Federal, State, and private agencies. The future of State park systems depends on how well their staffs assume leadership. Western States have lagged behind the East in appropriation of money for and development of State parks. The Land and Water Conservation Fund Act of 1964 placed the authority and responsibility for park development at the State level. Suggestions on how State park directors can carry out their leadership roles effectively are given.

71164 Jackson, H.M. Challenges in reclamation's future. In: National Reclamation Association. COMPENDIUM, 36th ANNUAL CONVENTION, 1967. Honolulu, p.51-58, 1967.

Reclamation is now in an era of multi purpose development; changes in society have given it new functions. Legal and administrative institutions are discussed. The speaker, Senator Henry M. Jackson, Chairman, Senate Interior and Insular Affairs Committee, cites a few of the critical issues, such as, the appropiateness of the acreage limitation policy, alternate means of financing construction projects, the need for policy guidelines in determining whether an area should be preserved or developed, regional water resource shortages, and the testing of new techniques.

71165 Jackson, H.M. Public policy and environmental administration. BIOSCIENCE, 17(12):883-885, Dec. 1967. Photo.

In a speech given at the American Institute of Biological Sciences, Senator Jackson of Washington emphasized the acceleration of the pace of environmental change on earth as a result of the actions of men. Some of the problems discussed are: air and water pollution, the pressures of population, the over-use of pesticides and chemicals, the loss of open space and outdoor recreational opportunity, and mental health problems caused by the decay of urban areas. The Senator advocates more research into the scientific and social causes of environmental decay and the development of long-range policies on environmental quality and the administration of the environment. Projected trends, their implications, and available alternatives should be made available to policy makers. To meet this challenge, public and private groups must work together to gain and maintain a quality environment.

71166 Jackson, J.N. Introduction to the role of government in planning and developing outdoor recreation land — A panel discussion. In: Conference on Parks and Outdoor Recreation, Toronto, Canada, 1967. PROCEEDINGS. Toronto, The Conservation Council of Ontario, p. 15-16, 1967.

". . . government at all levels has two great responsibilities, the formulation of policies for the future and establishing the means to implement such policies."

71167 Jackson, J.P. Saving the forest primeval. NAT. WILDL. 5(4):36-37, June-July 1967. Photo.

Case histories of preservation of tracts of indigenous forests which provide a true link for future generations with their heritage show the successful achievements of private individuals and State agencies in the field of conservation.

71168 Jackson, W.E., Wohlers, H.C. You need an air pollution inventory. AMER. CITY, 82(10):119-120, Oct. 1967. Ref., tables.

In order to protect the purity of air, it is necessary to make inventory of the emissions which contribute to air pollution. Such an inventory has been undertaken by the environmental sciences staff of the Drexel Institute of Technology, Philadelphia, Pa. The study area embraces the Delaware Valley region, an area of 4,600 square miles with a population density of 1,500 people per square mile. Eleven counties on both sides of the Delaware River and portions of 3 states are included. Methodology is discussed and the values of such procedures are enumerated.

71169 Jacobs, S. Let's do something about vandals. AMER. COUNT. GOVERN. 32(10):12-15, Oct. 1967.

Vandals are ruining millions of dollars worth of property every year. Parks, public buildings, road signs, and even private homes are subject to their attacks. Five indicators of emerging vandalism based on a survey conducted by the U.S. Office of Education in collaboration with Syracuse University are described. Some concrete suggestions to prevent such destruction to public and private properties are offered.

71170 Jahn, L.R. Needs and approaches for improving resource education and management. MINN. OUT-OF-DOORS, 12(8):19, 28, June 1967.

The importance of resource education for citizens and students of all age groups is emphasized. Program improvements can be effected by State and local boards of education and school administrators, and resource managers' evaluation of the quality and success of the existing programs.

71171 James, L.D. The economic analysis of recreational reservoirs. KY. LAW J. 55(4):822-843, 1967. Ref., illus., tables.

Increased expenditures by State and Federal agencies for highways, parks, and other public facilities have forced planners to justify projects in terms of favorable ratios of benefits to costs. This article explains a method for showing the required economic feasibility of recreational activities as some of the several major competing uses for water resources. The procedures described are applicable not only to outdoor recreation use but to other major water resource uses as well.

71172 Jaska, B. The select few. TEX. PARKS WILDL. 25(7):24-27, July 1967. Photos.

Only 9 of the 60 State parks in the Texas park system have been classified as scenic. More areas have been recommended by the Governor to be included in the scenic category. The purposes and values of these parks are discussed.

71173 Jaska, B. Why State parks? TEX. PARKS WILDL. 25(6):7-11, June 1967. Photos.

As population increases, the demands for outdoor recreation increases, and there is a growing need for an adequate State parks system that can develop recreational potential without destroying historic and natural values. To meet this need, Texas has classified its parks into 4 types: recreation, scenic, historic, and historic sites.

71174 Jenrich, C.H. Famous N.Y. waterfront may regain historic flavor. NAT. FISHERM. Sect. B:22, June 1967. Photo.

A voluntary group of citizens are striving to raise funds to restore a section of New York's South Street to its 19th century status as "the street of ships". City, State and national officials favor the project which must move swiftly to avoid the wrecker's hammer on the ancient buildings.

71175 Jensen, C. The outdoor recreation crisis. SPORTS AFIELD, 157(6): 36-37, 106, 108, June 1967. Photo.

In the face of increasing population pressure on outdoor recreation resources, a seven-point program is suggested for future recreation resource planning and management.

71176 Jerome, W.C., Jr., Chesmore, A.P., Anderson, C.O., Jr. A STUDY OF THE MARINE RESOURCES OF BEVERLY-SALEM HARBOR. Boston, Mass. Dept. of Natural Resources. 74p. 1967. Ref., maps, photos. (Massachusetts. Division of Marine Fisheries. Monograph Series No. 4).

This report is an inventory of the marine resources of the Beverly-Salem harbor with particular emphasis on the ecology of the area during a 12-month period, January to December 1965. The study details geologic features of Quincy Bay and water analysis with concern for salinity and amount of water pollution. Samples of the fish found in the Bay were recorded. The catch was analyzed as to location of capture, age of fish, and value to fishermen, both commerical and sport. Some historical background on the exploitation of the marine resources of the area is presented. The economic evaluation of sport fishing, commercial fisheries, and recreational use of the Bay is reported. As a conclusion, 12 recommendations are submitted to improve the management and wise utilization of the marine resources. SH222 M4A32 No. 4

71177 Johns, W. Can the Everglades survive? CONSERV. NEWS, 32(11):1-4, June 1, 1967.

The future of the Everglades National Park lies in the insurance of an adequate water supply for the Park's biological community. The water rights and problems of the Park can be protected and solved through the cooperative efforts of the Corps of Engineers, the National Park Service, the Central and Southern Florida Flood Control District.

71178 Johns, W. Last chance for estuaries? CONSERV. NEWS, 32(12):1-6, June 15, 1967.

Values of undamaged estuarine areas are outlined; biological values on which a price tag can be placed; food values derived from daily production statistics per acre; protection values as areas to escape the tensions and pressures of a work-a-day world; and a haven for the migratory waterfowl – their nesting, resting, and feeding places. Such values cannot be measured in monetary terms. To preserve these areas with their important values, Congressman John D. Dingell of Michigan has introduced legislation which would bring about the preservation, restoration, and management by the States and Federal government of estuarine areas. Highlights of the legislation are discussed.

71179 Johnson, K.S., Gregory, E. OVERALL ECONOMIC DEVELOPMENT PROGRAM FOR FIRST TENNESSEE ECONOMIC DEVELOPMENT DISTRICT. Memphis, Tenn., Memphis State University. 256p. 1967. Ref., maps, tables.

In an effort to promote development in the First Economic Development District of Tennessee, the planners recognize that recreation plays an important part in such a program. The plan includes promotion of tourism because of the recreational facilities, unique scenery, and ecology found in the area. The development of tourism would bring added income to the area as well as provide more jobs. In addition to raising the income level, industrial expansion would also aid the recreational industry as greater income would enable people to participate in recreation activities. HC107 T2J6

71180 Jones, F.L. Coastal parks in California. SHORE BEACH, 35(1): 29-30, Apr. 1967.

The Director of the California Dept. of Parks and Recreation reports the achievements, developments and problems in planning and programming for California's coastal recreation resources. Statistics are given concerning the ownership of beaches and state projects for the coastal areas.

71181 Jorgensen, J.C. River basin surveys underway. RECLAMA. ERA, 53(2):40-41, May 1967. Maps.

The article outlines the Bureau of Reclamation's participation in the planning of river basin developments across the country.

71182 Judge, J. New grandeur for flowering Washington, NAT. GEOGRAPH. 131(4):500-539, Apr. 1967. Maps, illus., photos.

Although the author, a native of Washington, D.C., is nostalgic about the past, his article is realistic about some of the present changes in the city and enthusiastic about proposed plans for its future. The designs and plans of several civic improvement and beautification groups, including the Pennsylvania Avenue Commission with its recommendations, are described fully.

71183 Kato, S. Use of the national forests for recreation in Japan. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA, 7(26):393-400, 1967.

The Japanese national forests are important components of the Natural Park System. Stricter policies of conservation are needed because of too many visitors and commercial activities concentrated in certain areas. The Forestry Agency is contributing to the protection of the forests as well as to the establishment of recreation facilities, but a more powerful program is suggested in order to fulfill the public need for modern outdoor recreation activities in the national forests.

71184 Katz, M., Woelke, C.E. Water quality requirements of estuarine organisms. In: National Meeting on Water Quality Criteria, 1st, Philadelphia, 1966. WATER QUALITY CRITERIA. Philadelphia, American Society for Testing and Materials, p. 90-99, 1967. (ASTM Special Technical Publication No. 416).

Industrial and domestic wastes can be disposed, without detrimental effects, into the estuarine and marine environments. Properly designed disposal systems can distribute wastes so that the other beneficial uses of the aquatic environment are not harmed. A prerequisite to planning the disposal system is knowing the life history and ecological requirements of the important aquatic species which use the environment. TD370 N3 1966

71185 Kaufmann, W. Stuttgart cleans its air. LANDS. ARCHITECT. 57(3):176-178, Apr. 1967. Map, illus., photos.

The old city of Stuttgart, Germany shares such modern problems as air pollution and vanishing space with newer cities. Comprehensive planning for Stuttgart's metropolitan areas gave answers both to preservation and to promotion of open space linking downtown areas to suburbs, a healthy climate, and total reorganization of vehicular and pedestrian traffic. Its central business district is located among legally protected vineyards, orchards and forests. By such means, Stuttgart has achieved an atmospheric renewal.

71186 Kavaler, L. DANGEROUS AIR. New York, John Day. 143p. 1967. Illus.

The book discusses the harmful effects of air pollution upon all living things. Population distribution, climate, cars and other vehicles, garbage disposal, industry, and other factors which contribute to dangerous air are described. To reduce air pollution, such suggestions as the use of electric and internal combustion engines, huge city incineration, underground transportation, and relocation of industry are offered for individual and community practice. TD883.13 K3

71187 Kaylor, J.F. Land and water and Outdoor Recreation. In: American Camping Association. OUTDOOR RECREATION – CAMPING. Martinsville, Ind. p. 5-8, 1967.

Starting with a brief history of outdoor recreation, including early conservationists and innovators, the present programs and needs of outdoor recreation are presented, with a discussion of relevant legislation.

71188 Keenan, J.W. The role of the Provincial government in planning and developing recreation areas – The role of government – A panel discussion. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, The Conservation Council of Ontario, p. 21-24. 1967.

In planning and developing outdoor recreation areas in Ontario, the Provincial government has many duties. They include recreation research, inventory and assessment of the resource base; the development of a complete, balanced and adequate park system; and an improved management of all the public domain lands to take care of the growing importance of outdoor recreation use.

71189 Kellogg, C.E. Fit suburbia to its soils. URB. LAND, 26(11):3-7, Dec.

1967. Illus.

This article is a description of the nature of soils, how the knowledge of soils can be applied in evaluating land for suburban development, and the perils of ignoring danger signals which soil surveys may reveal. Soil surveys and soil maps may be very useful tools in site selection and development. These surveys and designed to give alternative use for each kind of soil and to predict outcomes under these alternatives.

71190 Kelly, G.E. High-density use, low maintenance operation. AMER. CITY, 82(10):102-104, Oct. 1967. Map, photos.

In the area surrounding Pittsburgh, Pa., there are nine regional parks. This article explains how the natural beauty of these parks can be maintained with a minimum amount of maintenance of these high use areas.

71191 Ketchum, B.H. Man's resources in the marine environment. In: Conference on the Status of Knowledge, Critical Research Needs, and Potential Research Facilities Relating to Ecology and Pollution Problems in the Marine Environment, Galveston, 1966. POLLUTION AND MARINE ECOLOGY. New York, Interscience. p.1-11, 1967, Ref., map, illus.

This article is the keynote address to the conference. The author discusses the ecologist's role in pollution of the marine environment, follows the fate of a pollutant, gives the structure of ocean ecology, and emphasizes the nutritive value of the sea. A national commitment to the abatement of pollution is required for any progress to be made.
QH541.5 S3C6 1966

71192 The king can do no wrong. The Government can do no wrong. WEST. OUTD. QUART. 34(2):1, 12, Spring 1967. Illus.

This editorial castigates Internal Revenue for trying to withdraw the tax exempt status of the Sierra Club which opposed the Federal government in its attempt to build dams which would damage a national park. An addition to section 501(c) (3) of the Revenue Act is proposed.

71193 Kinnear, A.D. 'Rectangle best overall design'. SWIM. POOL AGE, 41(12):17-19, Dec. 1967. Photos.

Increasing interest in competitive swimming, and emphasis on effective teaching methods indicate that rectangular shape is the most functional in designing swimming pools.

71194 Kinney, J.E. The third dimension in pollution control. J. FOREST. 65(8):530-535, Aug. 1967. Photos.

Suggestions for improvement in water pollution management include an increase in Federal programs, greater citizen participation in local pollution problems, and a review of water quality standards. The need for Federal and local involvement is illustrated in the land management and water quality control of Lake Erie.

71195 Kirk, M.D. Some possible wilderness areas for southern Ontario – Wilderness – a panel discussion. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p. 99-100, 1967.

Some examples of natural areas which

should be preserved by purchase, land use easement, or legislative protection are described. These are largely in Southern Ontario where "population pressure will soon destroy their intrinsic value."

71196 Kirkpatrick, R.B., Davey, S. P. Downtown wildlife. NAT. WILDL. 5(5):4-8, Aug. – Sept. 1967. Photos. This article, based in part on a paper read before the 1967 North American Wildlife and Natural Resources Conference encourages the promotion of wildlife conservation in urban areas. Appreciation of city wildlife values, wildlife and habitat management within the urban area and funding from city, county, and State appropriations of the conservation budget are essential to city wildlife preservation.

71197 Kitchen, J.W., Hendon, W.S. Land values adjacent to an urban neighborhood park. LAND ECON. 43 (3):357-360, Aug. 1967. Ref.

A description is given of a study in Lubbock, Texas, which attempts to determine the effects of urban parks upon surrounding residential areas. Background data is discussed in relation to the development of additional value being placed on such properties. Conclusions, through the use of statistical correlations, are drawn and presented in this article.

71198 Klein, E. Pre-camp staff training. CAMP. MAG. 39(5):12, May 1967. Photo.

Staff training before the arrival of campers should allow time for relaxation and discovery. The camp philosophy should be stressed, new and old staff should "mix", and the regular camp program should be reviewed.

71199 Knapp, T.R. Lighting gets more people in the swim. AMER. CITY, 82(6):130, 132, June 1967. Photos.

The Director of the Parks and Recreation Department, Aurora, Colo., describes that city's experience in illumination of swimming pools. Daytime attendance had risen to such proportions that overcrowding occurred. To alleviate this condition, the Department designed and installed the outdoor lighting systems for two swimmings pools. The Department's capital improvement budget funded the illumination of the pools. The underwater lighting systems for the two pools and deck areas were financed by the Aurora Rotary Club and the Morris Heights Improvement Association. These lighting systems afford good protection of swimmers both in and out of water. Aurora plans to provide more outdoor lighting in multi-use areas such as basketball and tennis courts.

71200 Knetsch, J.L. Economic aspects of outdoor recreation. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p. 51-59, 1967.

This is a paper concerned with the interpretation and misinterpretation of recreation demands, nature of economic yields associated with activity, rationale for dealing with recreation as a public matter, consideration of the mix of various private and public means to bring a more efficient provision of more valuable and diverse recreation opportunities.

71201 Knetsch, J.L. Providing outdoor recreation. TRENDS PARKS RECREAT. 4(3):16-19, July 1967. Photos.

This paper, presented at the 1966 annual meeting of the National Conference on State Parks, discusses the rationale for public vs. private provision of outdoor recreation and free entrance to outdoor areas. The economic theory of user charges is stated. Two major issues are considered: (1) the degree to which public development is expected and the degree to which private provision should be used to meet the growing demand; and, (2) the degree to which users should pay individually for recreation areas and facilities upon use, or meet costs for these opportunities by general or special taxes.

71202 Koenings, R.H. Government assistance to private enterprise. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p. 45-49, 1967.

The 36 different Federal agencies, boards, or commissions involved in outdoor recreation in the U.S. are enumerated. The need for assisting private enterprise in providing outdoor recreation areas and facilities as well as coordination with public efforts is apparent.

71203 Koller, H. Conservation at the Academy. COLO. OUTD. 16(4):8-9, July-Aug. 1967. Photos.

A brief pictorial review of conservation practices and policing at the U.S.A.F. Academy at Colorado Springs. The Academy is Colorado's number one attraction for tourists, thus a desire by the administration to improve the appearance by promoting intelligent practices of soil, water, forest and grassland areas. As an example of the work involved, approximately 1,500,000 trees and shrubs have been planted in reforestation and erosion control measures.

71204 Krug, C.S. Trail maintenance – some of the hows and whys. APPALACHIA, 36(3):495-502, June 15, 1967. Photos.

How a trailman can cut a sylvan "boulevard" is explained. Information is given about the tools he should use, the size of the cleared trail (a "hall-way" approximately five feet by eight feet is recommended), and maintenance procedures.

71205 Krutilla, J.V. Conservation reconsidered. AMER. ECON. REV. 57(4): 777-786, Sept. 1967. Ref.

The author discusses the economic aspects of the "new conservation" and the relation between the preservation of scenic wonders, threatened species, etc. Means of achieving the desired objectives are discussed, and the practical problems of implementation are presented. The traditional justification of conservation of natural resource stocks to be used in production by future generations may be changing since new technologies have sharply cut back rates of depletion.

71206 Kuehn, J.A., Brewer, D. Conflicts within recreation: an emerging problem in the allocation of water and investment funds. LAND ECON. 43(4): 456, 461, Nov. 1967. Ref., illus.

This article discusses the problem of allocation of water resources and investment funds for outdoor recreation development and proposes solutions. Some recreation activities require development and utilization of facilities, which preclude other types of activities. Construction of reservoirs often sacrifices streams and destroys scenic values and wildlife. Efficiency norms should be adhered, to, to maximize the national welfare from recreation. The benefit-cost analysis method must be used to determine effectively the efficiency of alternative recreation projects. There is a bias for reservoirs among local, State and Federal agencies in formulating investment decisions.

71207 Lambert, D. Facets of wilderness. LIV. WILDERN. 31(96/97):10-18, Spring-Summer 1967. Map, photos.

The author, a resident just outside the Park boundary, describes the efforts of the many interested citizens that led to the establishment of the Shenandoah National Park in the '30's. This large tract of land in the Appalachians, less than a hundred miles from a megalopolis, offers areas which might well be set aside for the National Wilderness Reservation System. A map shows acreage proposed for wilderness designation by the conservation groups and the National Park Service.

71208 Lands for Texas wildlife. TEX. PARKS WILDL. 25(5):9-24, May 1967. Maps, photos., tables.

Urbanization, industrialization and mechanized farming enhance economic development at the expense of wildlife habitat. Texan practice in dealing with the problem of endangered species and the State's long-range plan for wildlife are described.

71209 Lanphear, F.O. Aesthetics of highway design. In: Purdue University. Road School. PROCEEDINGS, 53rd, 1967. Lafayette, Ind. 51(5):96-101, Sept. 1967. (Purdue University. Engineering Dept. Extension Series No. 128).

The article discusses the broad principles involved in the achievement of a functional and aesthetic highway. The aspects most frequently abused are (1) contrast, (2) compatability of location and design, (3) scale of landscaping, (4) originality. The importance of coordination between the engineer and the landscape architect in the initial selection and layout of a highway is explained in: (1) the value of extensive landscaping at selected sites; (2) desired contrast by rock outcroppings, buildings, and highway interchanges of different structural design; (3) plantings for safety and soil erosion control; (4) the preservation of existing natural features. TA153 I6B1 No. 128

71210 League of Women Voters. LAND AND WATER FOR TOMORROW. TRAINING COMMUNITY LEADERS: A HANDBOOK. Washington, D.C., League of Women Voters Education Fund. 44p. 1967. Illus.

Since more public understanding and support are needed for wise use of land and water resources, the Education Fund of the League of Women Voters has prepared this handbook on how to hold conferences and seminars for community leaders. Sponsored by a grant from the Water Pollution Control Administration of the Department of the Interior, the League's Education Fund developed a pilot project, "Schools for Citizens on Land and Water Use for Tomorrow's Living." The plan of operation provided for six pilot Seminars on Land and Water Use in six particular regions. The handbook gave the results of these six three-day Seminars on Land and Water Use and suggested follow-up activities.

71211 Leber, W.P. Corps of Engineers Projects: how they work. PARK MAINTEN. 20(10):76, 80-81, Oct. 1967. Photos.

Since 1944 under authorization of the Flood Control Act enacted that year, the Corps of Engineers has been constructing, maintaining, and operating park and recreation facilities in reservoir areas. Throughout the nation there are some 350 Corps of Engineers' reservoirs in 44 States. These provide 4 million acres of water surface, and 4 million acres along 28,000 miles of shoreline for recreaational enjoyment. This total shoreline area is 2½ times the size of the combined seashores of the United States along the Atlantic, Pacific, and Gulf coasts. The Corps welcomes State and local cooperation in developing recreation potential of the sites.

71212 Lesher, J.M. City – school cooperation builds a park two years sooner. AMER. CITY, 82(11):80-81, Nov. 1967. Photos.

A community recreation program in Dixon, Calif., is an illustration of a cooperative park constructed 2 years earlier at 17% of the cost through the cooperation of the School Board and the city crews.

71213 Limburg, A., Kirkpatrick, D. Pollution and your boat. WATER-SPORT, 1(2):12-15, Spring 1967. Photos.

Discrepancy in State law on pollution from boats is discussed. Key clauses from the National Association of State Boating Law Administrators' "Model Act to Prohibit Littering and Disposal of Untreated Sewage from Boats" are listed.

71214 Lincoln, A., Jr. Facts on the Redwoods. AMER. FOR., 73(11):41, 56, Nov. 1967. Photo.

A conservationist upholds the belief that natural flooding and deposition are conducive to pure redwood forest. The article contends that technology and economic considerations will greatly alter the commercial forest.

71215 Little, (Arthur D.), Inc. MARKETING STUDY AND RECOMMENDATIONS CONCERNING FEDERAL RECREATION AREA PERMIT AND FEE SYSTEM. Cambridge, Mass., 229p. 1967.

Meaningful conclusions can be drawn from this study about the frequency and duration of outdoor recreation trips involving Federal recreation areas, the types of visitors, their experiences and attitudes regarding the fee-charging at such areas, the effect of visitation patterns upon potential fee revenues, the problems involved in enforcing fee programs and other factors appropriate either to evaluate the effects of the present Land and Water Conservation Fund fee program or to form useful recommendations for the modification of that program. The report advocated the requirement of a recreation user permit when two criteria exist concurrently within selected land areas:

(1) the area has recreation facilities or services furnished to the public at Federal expense, and (2) the area is administered primarily for scenic, scientific, historic, cultural, or recreation purposes. The names of the administering Federal agencies of these selected land areas are provided in the report. A glossary of terms used is included, also.

71216 Littlefield, E.W. "Forever wild" upheld: anatomy of a convention. AMER. FOR. 73(11):36, 54, 56, Nov. 1967.

The New York State Constitutional Convention and its organization is described, and the essentials of Article Eight and Article XIV of the proposed new constitution, "Natural Resources and Conservation" are compared. The administration of the Forest Preserve remains a controversial issue.

71217 Louisiana. Wildlife and Fisheries Commission. Commission takes firm stand on future uses of public land. Part I. LA. CONSERV. 19(7/8): 2-5, 20-22, July-Aug. 1967. Photos.

The State of Louisiana presents its policy on the use of public lands, estuarine areas, and offshore waters and water bottoms which extend to the limits of the Continental Shelf, to the Public Land Law Review Commission. Each type of federally owned land within the State is categorized, and the best use is recommended. The need for good habitat management for preservation of wildlife is emphasized. Some Federal agencies are criticized for their easement policies. The value of public lands for recreational uses is also stressed. To the Public Land Law Review Commission, the State recommends the full utilization of federally owned lands and also wildlife management. Better management and further exploitation of the recreation possibilities of the sea are suggested.

71218 Lugar, M.E. WATER RIGHTS LAW AND MANAGEMENT IN WEST VIRGINA – Future Needs and Alternatives. Morgantown, W. Va. Univ. 50p. 1967. Ref. (West Virginia Center for Appalachian Studies and Development. Public Affairs Series No. 4).

The status of the water supply in West Virginia is reviewed; uses of water discussed, and areas of water shortage in the United States are noted. The legal rights to use water are treated in detail. The need for regulation of water use by a public agency is suggested. Principles of watershed management are discussed. Proposed legislation for regulation of water use in West Virginia can be drafted only after certain policy decisions suggested in this report have been promulgated. The State cannot blindly adopt the water code of another State but must draft legislation based on West Virginia's water resources and the present and foreseeable demands on that resource.

71219 Lykes, I.B. Natural beauty and the beast. TRENDS PARKS RECREAT. 4(2):4, Apr. 1967.

This editorial is concerned with the pollution of our highways in the form of litter, garbage, and refuse dumped by careless and indifferent motorists onto public and private property. Such organizations as Keep America Beautiful, Inc., the Good Outdoor Manners Association, New England Family Campers Association, numerous hiking and nature clubs, and many civic groups dedicated to the eradication of this blight should be supported. A program involving education, litter containers in cans, emptying litter receptacles as part of service at filling stations, and realistic anti-litter laws is proposed.

71220 Lynch, D.M. In the shadow of Fort Union. N. MEX. MAG. 45(9):22-25, Sept. 1967. Photos.

Fort Union, now a National Monument, was at one time a major fort in the defense of the Southwest. The article summarizes the history of the old fort, built first in 1851 and closed in 1891. It lay unprotected and disintegrated in part until 1956 when the 720-acre reserve passed into the care of the National Park Service.

71221 Lyon, D.L. An ecologist's view of the population problem. LIV. WILDERN. 31(96/97):31-35, Spring-Summer 1967. Photos.

Because of the increase in world population there must be a control set on population increases. If there isn't a limit set, the country will soon run out of non-renewable resources, such as open space. Overuse of these resources reduces the quality of the environment. Man must change his concept of his relationship to nature if he hopes to solve the problems created by over-population.

71222 McCartney, R.B. Field management for public dove hunting in the United States. In: Southeastern Association of Game and Fish Commissioners. PROCEEDINGS, 18th annual conference, 1964, Columbia, S.C., p.185-187, 1967. Table.

The results from a survey in which questionnaires were sent to all of the States which had an open season on mourning doves during 1963 are shown here. The abundance of doves and the availability of hunting areas varied widely throughout the United States. A table showed public dove hunting field management by State and land ownership classification. Techniques of dove field management vary and are still in the experimental stage in most States. In recent years a steady increase in the popularity of dove hunting has been experienced in most States with an open season. Further increases in dove hunting pressure and popularity may be expected in the future. This will result in more intensive dove field management on both public and private lands.
SK351 S7 1964

71223 McClane, A. J. Where do we go from here? FIELD STREAM, 71(10):10-12, 14, 16, 125-129, Feb. 1967. Illus.

The fishing editor takes a penetrating gaze toward the future, what it may be like by the year 2000, and what conservationists should do or continue to do in order to preserve some of our forests and the purity of our rivers. Conservation actions of recent Congresses are discussed.

71224 McCloskey, M. Wilderness management within national parks. SIERRA CLUB BULL. 52(4):12-13, Apr.-May 1967.

This article is derived from testimony by the Conservation Director of the Sierra Club at wilderness hearings on Lassen National Park. The article discusses the different concepts of "wilderness buffers," "wilderness thresholds," and "transition zones" and deplores the practice of grouping them together under Class III, "Natural Environment Area" classification of the Bureau of Outdoor Recreation's recreation land classification system. Logic and the Wilderness Act require buffer zones to be within the park boundaries as this insures their remaining buffer zones. The National Park Service proposed to put the buffer outside the boundaries of wilderness to be protected.

71225 McInteer, J.F., Jr. Hunting on public lands. VA. WILDL. 28(9): 3, Sept. 1967.

Criteria for public hunting areas are proposed.

71226 McInteer, J.F., Jr. Management objectives on public lands. VA. WILDL. 28(8):3, Aug. 1967.

The viewpoint taken by this author on the management of public lands is that the Federal government should have as its primary long-range management objective the improvement of the habitat for maximum sustained yields of wild game for recreational use.

71227 McInteer, J.F., Jr. Public land law review. VA. WILDL. 28(7): 3, July 1967.

The objectives and duties of the Public Land Law Review Commission are discussed. A recent development in public land policy which involves the question of jurisdiction over resident wildlife, is viewed with alarm. The editorial recommends that Congress reaffirm the principle that such jurisdiction on Federal public lands will stay where it has always been – with the States.

71228 Mackenzie, N.A. The importance of conservation for ourselves and our children. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p. 77-83, 1967.

Man is the only species that has the power or the ability, within limits, to change his environment. The task is to provide areas and ways for enjoyment, refreshment of mind and spirit, and observation and appreciation of "the outdoors" in the natural and original state. Where this proves difficult or limited in its usefulness to a minority, it is imperative to discover and provide substitutes.

71229 McMahan, J.W. Will downtown survive? ARIZ. REV. 16(11):1-5, Nov. 1967. Photos.

The Director of Development Research Association in Los Angeles, in his address to the Flagstaff, Arizona Area Planning Workshop, 1967, recommended economic, physical and social programs for revitalization of downtown areas in the nation.

71230 Madar, O.M. UAW structure emphasizes recreation, leisure-time activities and conservation. PARKS RECREAT. 2(11):31, 63-64, Nov. 1967.

Because of increased leisure time for labor, the United Auto Workers (UAW) is expanding its recreation department and redesignating it as the UAW Dept. of Recreation and Leisure-Time Activities. A new department titled "UAW Dept. of Conservation and Resource Development" has also been created. Policy statements and goals of each of these departments are outlined.

71231 Magill, A.W., Leiser, A.T. NEW HELP FOR WORN OUT CAMPGROUNDS. Berkeley, Calif., Pacific Southwest Forest and Range Experiment Station, 5p. 1967. Illus., photos.

Revegetation of "difficult" sites in campgrounds is explained. Information is given about programs seeking solutions through research to these problems.

71232 Maldague, M. Amenagement forestier polyvalent et conservation de la nature. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA, 7(26):72-84, 1967.

To face up to the increasing pressure on forest resources, modern forestry shifts to multiple use of forests. Territorial zoning, a sound measure of protection and rational management are equally in agreement with the fundamental ecological principles. To realize the objectives of multiple use management, the author develops the concept of basic and creative multiple use management of the forests. The need to promote education in regard to nature conservation is emphasized.

71233 Marckworth, G.D. Statistics from schools of forestry for 1966. Degrees granted and enrollment. J. FOREST. 65(4):265-271, Apr. 1967. Tables.

Statistics and tables for the years 1965 and 1966 show bachelor, master, and doctorate degrees granted in specialized fields at schools of forestry in the United States. Other tables show enrollment by classes for the fall term 1966-1967 and coverage for the academic years 1944/45 – 1966/67 with numerical differences on the total class enrollment per year.

71234 Marcum, H. Stream beautification in Hot Springs. NAT. GARD. 38 (9-10):20-21, Sept.-Oct. 1967. Photos.

Along the Hot Springs and Gulpha Creeks in Hot Springs, Ark., two local Girl Scout Troops, members of the Boy's Clubs and members of six garden clubs planted trees and shrubs to beautify the creeks and provide the City with much needed green spaces.

71235 Mathis, W.P. An attempt to improve stream fishing by manipulating the lakes in the stream basin. In: Southeastern Association of Game and Fish Commissioners. PROCEEDINGS, 18th annual conference, 1964. Columbia, S.C., p.341-357, 1967. Ref., tables.

Of the 21 old river lakes in the Saline River basin of Arkansas, 18 (comprising 168 acres) were entirely eradicated in the summer of 1963 by using rotenone. Subsequently, these 18 lakes were overstocked with game fish from State-owned hatcheries. The game fish were stocked early enough in the year to allow them to grow into sub-adults and to become acclimated by the time of the first flood water. This management plan was a combination of the "Ponds to Improve Stream Fishing" idea and the "Nursery Pond" idea. The theory was that fish from crowded populations will emigrate during overflow periods and thus provide desirable fish as stocks for the Saline River. Any improvement in the lakes associated with a river must eventually result in an improvement to the river itself through an improved fish population. SK351 S7 1964

71236 May, W.F. Cp & D $\overset{?}{=}$ P Does packaging convenience plus disposability have to equal pollution? TRENDS PARKS RECREAT. 4(3):20-23, July 1967. Photo.

In an address to the 36th National Packaging Conference, the speaker considered the national problems of litter and pollution. As a first step to change the above equation shown in the title, the packaging industry should take the lead and organize a Packaging Materials Research Council to review the entire field of packaging materials; to seek means to provide degradable materials; and to evaluate developments in the technology of refuse disposal. The Council should coordinate its activities with the Federal anti-pollution agencies. Today the pollution of air and water is both an industry problem and an industry responsibility.

71237 Mellanby, K. PESTICIDES AND POLLUTION. London, Collins. 221p. 1967. Ref., maps, illus., photos.

This book deals objectively with the subject of environmental pollution in Great Britain. The effects of water and air pollution, radiation, and pollution of the ocean and shore are given. The use of herbicides for weed control is emphasized. The control of pests and deleterious effects of insecticides are discussed. In order to reduce future environmental damage the use of pesticides should be curtailed to a minimum.

71238 Merriam, L.C., Jr. Recreation land management and the new forestry. NAT. PARKS MAG. 41(237):14-18, June 1967. Ref., photos.

A comparison of past and present uses of forest lands clarifies some of today's challenges and problems in management for recreation and lumbering. How much should the government lead in providing facilities and educating users to follow certain helpful practices? From the recreation standpoint new forestry and education should include a background in biological and physical sciences with ecological stress and the traditional courses involving the vegetation, uses and environment of the forest. Other courses in the social sciences, economics, sociology, psychology should also be taught together with courses in managing the recreation environment and its users.

71239 Meyer, C.R. The beach access problem. SPORTFISHING, 3(11):56, June 1967.

As seashore development seals off beach access, cooperative arrangements are suggested as a means of increasing availability of seashore sites to the public.

71240 Middleton, J.T. Air pollution threat to flora and fauna. CONSERV. CAT. 2(2):1-3, Dec. 1967. Photos.

Air pollution increases in proportion to the standard of living. The effect of pollution on human health is usually insidious. Agricultural losses are estimated at 500 million dollars a year. Many plants are more sensitive to air pollution than humans and animals. Examples, locations, and specific pollutants are given. The Clean Air Act of 1963 spurred pollution control at State and local levels. The Air Quality Act of 1967 will greatly expand pollution control.

71241 Miller, D. Can B.C.'s water users learn to live together? The fisheries position. WEST. FISH. 73(6):24, 26, 28, 32, Mar. 1967. Photo.

The main speech at the 17th annual Natural Resources Conference at Victoria, British Columbia, February 1967, claimed that the low-value use of water by fisheries should give way to high-value use. This article is a rebuttal. The Pacific salmon is a resource with great potential. To achieve this potential, it requires clean water and undisturbed stretches of gravel in stream beds in order to complete its life cycle. Salmon is the source of livelihood for thousands of British Columbians. To many more, it provides outdoor recreation through sport fishing. Water is the environment for salmon throughout its entire life. In this discussion of the fisheries as a claimant for water use, two points are emphasized – the dependence on clean water of the Pacific salmon and its importance as a part of the great British Columbia fishing industry.

71242 Miller, E.L., DeTuerk, J.R. High-density fairways for 1975. LANDS. ARCHITECT. 57(4):303, July 1967. Illus.

Toftrees, a new town one mile north of State College, Pa., will provide employment, shopping, living, recreation and cultural facilities when completed in 1975. The community is designed to support present and future needs for more than 6,000 people. The concept was to create a total community adapted to an excellent site which would be both aesthetically pleasing and economically feasible.

71243 Mitchell, T.R. Controlled shooting preserves. Wing-shooting a la carte. WILDL. N.C. 31(10):8-10, Oct. 1967. Photos.

The advantages of controlled shooting preserves are discussed and a list of North Carolina preserves for the 1967-68 hunting season is given.

71244 More than 10,000 acres are acquired for proposed Laurel Ridge State Park. WAT. LAND LIFE, 9(1):18, 23, Apr. 1967. Photo.

Over 10,000 acres of land for the proposed Laurel Ridge State Park, described as "a plan to save a whole mountain range," has been acquired by Western Pennsylvania Conservancy. Plans for the State park are discussed.

71245 Moses, R.J. Eleven states approach regional water planning together. In: National Reclamation Association. COMPENDIUM, 36th annual convention, 1967. Honolulu, p.127-133, 1967.

Structure and functions of the Western States Water Council are given. The 33-member Council created in 1965 was formed to promote cooperation among the 11 member States in the development of their water resources. TC801 N3 1967.

71246 Moss, L.I. In search of a subsidy machine: or why the Grand Canyon must be dammed. BULL. ATOM. SCIENT. 23(6):25-30, June 1967.

This article is adapted from the author's testimony before the Reclamations Subcommittee of the House Interior Committee. Ways of subsidizing water to reduce costs to agricultural users because of their limited financial resources are outlined. Costs and advantages of nuclear power and hydropower are compared. Power projects and their adequacy in meeting peaking power and reserve requirements are discussed. The proposed Grand Canyon dams are not economically justified; the cost to the U.S. Treasury will be greater than if direct subsidies were made. There has been a shift in public attitude toward building these dams and the Department of the Interior is no longer supporting the construction. The economic impact of the dam is only one aspect. Should the heart of the Grand Canyon be inundated, its wholeness as an ecological and geological unit would be destroyed.

71247 Mott, W.P., Jr. Cities in parks. TRENDS PARKS RECREAT. 4(2):25-28, Apr. 1967. Photos.

In the United States, economic growth has been given priority over the maintenance of an attractive environment, and natural beauty, livability and even health have become subordinate to economic growth. The Federal government has provided leadership in calling upon the citizenry to reclaim the natural beauty of the land, but state and local governments have not indicated a similar interest. The people must discipline themselves to save open space. One method would be the development of a green belt of park and open space areas around cities. The park and recreation programs of this country need a new, progressive and vigorous approach.

71248 Murdock, T. Green thumb in Nebraska. HOME GARD. 54(5):16, May 1967.

Green Thumb Areas, under the auspices of the Nebraska Game Commission, are being planned for watershed lake regions. Any nature lover may plant any tree species to improve wildlife habitat in these areas. The program has a three-fold value: conservation, education, and beautification.

71249 Murphy, E.F. GOVERNING NATURE. Chicago, Quadrangle Books. 333p. 1967. Ref.

The goal of man has always been to control his natural environment; he has equated use of resources with control of them. The establishment of an urban industrial civilization has vastly affected the natural world. Man views nature as a free commodity and makes incessant demands upon its resources. This book presents various philosophical stands of man's relationship to nature. It deals with pollution, and the economic and legal aspects of resources. HC55 M8

71250 Murphy, K. The triumph of the trumpeters. NAT. WILDL. 5(4):42-47, June-July, 1967. Photos.

The trumpeter swan, once hunted relentlessly over a wide range of North America and threatened with extinction in the first quarter of the 20th century, has been saved through the efforts of some militant conservationists and the Federal government. The recent history, characteristics, and behavior of these graceful birds in the wild and in captivity are described.

71251 Najer, A. Why I am for Article XIV. AMER. FOR. 73(8):30-31, 50, Aug. 1967. Photos.

A tree farm operator discusses the Adirondack Mountains and presents his views in favor of Article XIV of the New York State Constitution.

71252 National Golf Foundation cites course maintenance trends throughout the U.S.A. PARK MAINTEN. 20(8):12-13, Aug. 1967. Table.

On the basis of a sampling survey conducted by the National Golf Foundation (N.G.F.) throughout the United States there is a similarity in percentages spent for several components of annual budgets. However, total costs vary widely in different regional areas. Average maintenance costs for 18-hole regulation courses were grouped under four major headings: (1) Payroll, (2) Course supplies, (3) Repairs and maintenance, (4) Other costs. Statistics covered the 1965-66 period and were compiled from the reports of the Metropolitan Golf Assn., two California studies, and the most recent nationwide survey conducted by a large accounting firm.

71253 National Meeting on Water Quality Criteria, 1st, Philadelphia, 1966. WATER QUALITY CRITERIA. Philadelphia, American Society for Testing and Materials. 120p. 1967. Ref., tables. (ASTM Special Technical Publication No. 416).

The first national meeting on water quality criteria, sponsored by ASTM, brought the professional community together to evaluate the present state of scientific knowledge of quality requirements for agricultural, municipal, industrial, and recreational uses of water. Papers on the recreational use of water and methods to assay quality have abstracts under the personal authors. TD370 N3 1966

71254 National Parks Association. A wilderness plan for Petrified Forest National Park and the surrounding region. NAT. PARKS MAG. 41(238):10-11, July 1967. Map.

Regional planning and the establishment of three wilderness areas are recommended by the NPA to protect the Petrified Forest National Park from excessive visitation and facility development. Details of the NPA proposal are presented.

71255 National Parks Association. A wilderness plan for Shenandoah National Park and the surrounding area. NAT. PARKS MAG. 41(240):18-19, Sept. 1967. Map.

A map indicates the six proposed wilderness areas to preserve the scenic beauty of Shenandoah National Park as recommended by the National Parks Association at a public hearing of the National Park Service. Development of visitor facilities, access roads, and use of outdoor recreation opportunities in the surrounding regions are discussed. Pressure has been increasing for the development within the Park. Therefore, use of the Park should be confined to the ridge tops and around the two major trans-mountain roads. Designation of the wilderness areas would protect and preserve the natural values and fulfill the objectives of the National Park System.

71256 National Recreation and Park

Association. FEDERAL ASSISTANCE FOR RECREATION AND PARKS. AVAILABLE TO: STATES, LOCAL GOVERNMENTS, NON-PROFIT AGENCIES AND ORGANIZATIONS. Washington. Loose-leaf. 1967.

This comprehensive work – published by the National Recreation & Park Association, in cooperation with the American Park & Recreation Society, American Association of Zoological Parks and Aquariums, National Conference on State Parks, Society of Park & Recreation Educators, and National Therapeutic Recreation Society – suggests how to apply for Federal grants and technical aid. It describes the assistance programs of the Departments of Agriculture, Army, Commerce, Defense, HEW, HUD, Interior, Labor, Transportation, and Treasury; as well as such independent agencies as Advisory Commission on Intergovernmental Relations, AEC, Federal Aviation Agency, Federal Power Commission, General Services Administration, National Foundation on the Arts & Humanities, Office of Economic Opportunity, President's Council on Physical Fitness, Small Business Administration, Smithsonian Institution and Tennessee Valley Authority. It provides addresses of regional offices or installations for each agency. An agency qualification index and an alphabetical index listing services, facilities, key words, agencies and programs are also included. GV53 N32

71257 National Water Advisory Committees named. WAT. WASTES ENG. 4(4):50, Apr. 1967.

Secretary of the Interior Stewart L. Udall has appointed 5 National Technical Advisory Committees to recommend scientific bases for appropriate water quality standards. These committees will recommend to Secretary Udall the water use requirements for agriculture, recreation, aesthetics, industrial water supplies, public water supplies, and aquatic animal life. The 5 committee chairmen and some of the members are listed. A total of 84 scientists and water authorities were selected to serve on these committees.

71258 National Wildlife Federation. The paradox of the Yellowstone elk. NAT. WILDL. 5(6):18-19, Oct.-Nov. 1967. Photo

The article discusses the perpetuation of wildlife population in Yellowstone National Park, a problem common to almost all national parks. The Advisory Board on Wildlife Management, appointed by the Secretary of the Interior, recommends removal of surplus elk at Yellowstone by (1) trapping and herding, and (2) shooting by Park personnel or qualified citizens deputized for the work when other methods for removal are inadequate or impractical. Such a program is more humane and economical than harvesting the surplus elk through recreational hunting.

71259 Nemerow, N.L. Streams, rivers and lakes: pollution problems. In: Water Symposium, State University of New York at Buffalo, 1966. PROCEEDINGS. Dubuque, Iowa, Wm. C. Brown, p.30-33, 1967.

Fourteen examples of typical contaminants which restrict the uses of water as a resource are listed. The economic value of the resource, the desires of the local river basin community, an equitable allocation of stream pollution capacity, and some

of the technical problems facing the engineer in future abatement programs are considered.
TD224 N7W3 1966

71260 New resource laws. MD. CONSERV. 44(3):9-10, June 1967. Illus.

The more important of the recently enacted Maryland laws that affect natural resources are presented here in capsule form. These State laws concern water use, seafood research, air and water pollution problems, tourism, shore erosion control, game and hunting. They reflect interest in specific measures as well as overall conservation planning as exemplified in the establishment of the Air Quality Division in the State Department of Health.

71261 New simplified procedures for the measurement and documentation of pleasure craft. MOT. BOAT. 120(1): 96-97, July 1967.

The U.S. Coast Guard's formulae for measuring the weight of recreation boats for registration are enumerated.

71262 New York (State). Conservation Dept. THE ADIRONDACKS. NEW YORK'S FOREST PRESERVE AND A PROPOSED NATIONAL PARK. Albany, N.Y. 64p. 1967. Tables.

This study analyzes the Report on a Proposed Adirondack Mountains National Park to determine what the impact of such a proposal would be on the Adirondack State Park and upon the on-going programs of the Conservation Department. Management practices and policies of the National Park Service are reviewed and background materials on the existing state park are provided. The report also considers the Conservation Department's plans and programs for the Adirondack State Park. In addition, it analyzes the private lands - including the number of private parcels, their size, use, and value - which would be acquired by the Federal Government under the National Park proposal. In several essential areas, the report describes and illustrates the impact upon the State of the proposed Adirondack Mountains National Park.

71263 New York (State) Natural Beauty Commission. FOR HERITAGE/ FOR ENVIRONMENT/ FOR FUTURE... WITH PARTICIPATION 66. Albany, N.Y., Natural Beauty Commission. 23p. 1967. Illus., photos.

The Commission's first annual report presents information on State and local government, and programs and policies in the development of natural resources. The primary objective of the Commission is the improvement of the environment for the betterment of the people of the State of New York. A list is included of recent New York State legislation relating to environmental quality.

71264 Nicholson, H.P. Pesticide pollution control. SCIENCE, 158 (3803):871-876, Nov. 17, 1967. Ref, tables.

The use of certain pesticides, some of which build up concentrations in the brains of fish, increase fish kills considerably. An evaluation of some of the effects of pesticides and suggestions for detection and improving the quality of water, subject to pesticide pollution are given

71265 Nieblein, E. Wechselwirkungen Zwischen Erhoulungsbedarf und Waldwirtschaft. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA, 7(26):382-392, 1967.

Reciprocal action between recreation requirements and forest management. (translation of title)

71266 North Dakota. State Outdoor Recreation Agency. OUTDOOR RECREATION IN NORTH DAKOTA. STATE OUTDOOR RECREATION PLAN. Bismarck, 56p. 1967. Maps, illus., photos., tables.

The State of North Dakota has developed a plan for future recreation needs of the State. The plan considered resources and recreation supply of the private and all public sectors. Specific recommendations to accomplish goals for outdoor recreation in the State are presented.

71267 Norton, V.J. Discussion: policy issures and problems in outdoor recreation. J. FARM ECON. 49(5):1317-1320, Dec. 1967. Ref.

The discussion offers an explanation of the basic questions of public policy to outdoor recreation economics. It describes various theories, each with a short analysis.

71268 Nygren, H.D. For 160 years; nautical chartmakers for the nation. MOT. BOAT. 120(6):21-24, 57, Dec. 1967. Maps, illus., photos.

The history of the United States Coast and Geodetic Survey, created in 1807 to proceed with a "Survey of the Coast, " is given. This agency, now a part of the Environmental Science Services Administration, has done so much to make possible safe and pleasurable boating. The Survey provides charts and Coast Pilot volumes which are used by boatmen for recreational or commercial cruising.

71269 Ohio's 100-million dollar outdoor recreation program shows results. SOHIOAN, 39(5):12-14, Oct. 1967. Photos.

The Ohio Department of Natural Resources in attempting to appeal to people of all tastes in their three luxurious all-season lodges. Many examples of lodges and park operations are given, along with plans for the future.

71270 Oklahoma. Water Resources Board. OKLAHOMA'S WATER RESOURCES.1967. Oklahoma City, 62p. 1967. Maps, photos. (Its publication no. 16).

The powers, duties, functions and objectives of the Oklahoma Water Resources Board are outlined. Maps and statistics are included on major creeks, lakes, reservoirs, streams and tributaries. Water quality, water recreation, the water user, and flood prevention programs are discussed. TD224 05A no. 16

71271 Oliver, J. Why the swamp? SUBURB. LIFE, 37(10):34-35, Dec. 1967. Photos.

New Jersey's Great Swamp offers a wide range of outdoor recreation opportunities. This potential and suggestions for cooperative efforts to develop it are briefly described and illustrated.

71272 Other conservancy projects. NATURE CONSERV. NEWS, 17(1):9-23, spring 1967. Photos.

Areas owned, leased, under easement or contract, plus areas conveyed or assisted by the Nature Conservancy as of Feb. 15, 1967, exclusive of 1966 projects previously listed, are described.

71273 Outdoor showmen testify. Collins asks music - copyright exemption for fairs, carnivals. AMUSE. BUS. 79(15):22-23, Apr. 22, 1967. Photo.

Senate bill S.597 before the U.S. Senate Judiciary Subcommittee for Patents, Trade Marks and Copyrights would "levy a royalty on each loudspeaker on a midway or fairgrounds through which copyrighted music is played." William J. Collins, President of the Outdoor Amusement Business Association and owner of a major carnival, testified at its hearing for an exemption for carnivals and fairs. The weak financial condition of most commercial and agricultural fairs is stated, with supporting statistics.

71274 Owens, H.B. Emergence of professional landscape architecture in America. TRENDS PARKS RECREAT. 4(2):21-22. Apr. 1967. Photos.

Today the role of the landscape architect has changed from residential grounds and city garden designs to the public problems created by growing populations with their need for open space, roads and parking areas. The landscape architect's talents can be effectively applied to urban and regional planning. As a result of this changing emphasis, the education of the landscape architects must be broadened. The profession must redefine its functions and strengthen the curricula.

71275 Page, W. Hunting will never be the same. FIELD STREAM, 72(5): 62-63, 100-103, Sept. 1967.

Increased population will have a great effect on the quality of hunting in the years ahead. Drastic changes may occur for hunters in the future. These include shifts in hunting pressures, concentration of some species with emphasis on quality, trophies, and a whole new concept of game management. Measures which some States have taken to combat increased hunter pressure are described.

71276 Parker, W.D. Our disappearing small stream fishery resource. ALA. CONSERV. 37(2):16-19, Mar.-Apr. 1967. Photos.

This article examines the effect of water pollution on fish habitats. The siltation and dumping of industrial and domestic wastes into rivers reduced the numbers of fish that can survive in these rivers. To prevent the loss of the fishery resource, there must be cooperation between industry and municipalities, stringent enforcement of Alabama's anti-pollution laws, better construction practices, and effective community action.

71277 Payne, M.W. On policing a lakeshore. NAT.PARKS MAG. 41(237): 19, June 1967. Photo.

In a continuing anti-litter program, young people of the 4-H Clubs and Boy and Girl Scout organizations of Teton Country, Wyoming, patrol and clean-up the scenic lake areas of the Grand

Teton National Park.

71278 Pearl, M.A. A new look at the public lands. NAT. PARKS MAG. 41 (233):8-12, Feb. 1967. Photos.

The different uses of public lands are explained. In addition to a history of the public domain, he presents the work of the Public Land Law Review Commission—research studies, recommended changes for the future, and policy-making duties of the Commission.

71279 Pearl, M.A. Public Land Commissions. OUR PUB. LANDS, 17(2):14-17, Summer 1967. Photo.

This article is a review of the history of the Public Land Law Review Commission and its present duties.

71280 Pearson, N. The Niagara Escarpment. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p.85-88, 1967.

"The Niagara Escarpment assumes an importance out of all proportion to its area and it becomes the focus for the next great challenge: the provision of adequate parkland really close to the urban populations." The need now is for a plan for the Escarpment area, including the lands above and below it. The awareness of governments of the concern for this area must be ensured.

71281 Pechanec, J.F. The Range Society is at the crossroads. J. RANGE MANAGE. 20(3):125-128, May 1967.

The American Society of Range Management is the sole professional organization with conservation of rangelands as its dominant objective. With increasing urbanization and leisure time available, the Society should accept broader professional concern for all matters that pertain to ranges in tomorrow's world. It should adopt a stronger conservation policy. There should also be closer ties with user groups and other professional natural resource organizations.

71282 Peery, C.H. Progress report of Virginia's trout fee-fishing program. In: Southeastern Association of Game and Fish Commissioners. PROCEEDINGS, 20th annual conference, 1966. Columbia, S.C., p.346-356, 1967. Illus., tables.

The first fee-fishing stream in Virginia, Big Tumbling Creek, has been in operation from the first Saturday in April through Labor Day for trout anglers each year since 1964. This report gives the results of a fisherman survey that covers such information as: days of fishing, type of sample, number of previous trips, type of fishing license used, and origin of fisherman. Data comparisons for each year with analyses are included. The report also describes the stream the staff operating the fee-fishing program, stream regulations, facilities, trout stocking methods, concessions and record-keeping procedures as well as camping facilities, law enforcement, and cost of operation. SK361 S7 1966.

71283 Petrie, J. Theft insurance. TRAIL TIMBERL. (581):81-82, May 1967.

Expansion of existing theft insurance

plans for use in outdoor recreation coverage is explained.

71284 Peugnet, A.A. Flyspeck on Glacier Peak. SCIENCE, 158(3798): 205, Oct. 13, 1967.

This letter defends mining operations within the proposed North Cascades National Park. The Kennecott Copper Company is ready to develop a 450-acre site within the Glacier Peak area of the North Cascades. Benefits from their development of the proposed pit outweigh any temporary deleterious effects. The tailings will not necessarily pollute the water or destroy the fish. Nature is a great restorer, especially in areas of reasonable amounts of rainfall. Kennecott may also reclaim the area when the mining work is completed.

71285 Pittman, S. A nature trail interests children in their natural surroundings. PARK ADMIN. 32(8): 26-27, 29, Aug. 1967. Map, photo.

The city of Birmingham, England has set up a nature trail that is primarily for children. On the trail are various stations where children may stop and learn about several aspects of their environment. A guide book in easy-to-read language is provided.

71286 Pleva, E.G. The present position in Ontario of parks and outdoor recreation. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, The Conservation Council of Ontario, p.5-13, 1967.

Some pressing problems are enumerated: fragmental, multi-layered nature of pattern of parks; need for coordination of complex framework of systems constituting resource of parks and outdoor recreation opportunities; remaining opportunities of the waterfront of the Great Lakes; imbalance of open space to built-on areas in urban areas; definition of the term "wilderness"; training of professional personnel by universities; Ontario's "Design for Development" and its implications; recreation and parks as separate parts of the total problem. Recreation is not the sole answer to problems of less developed areas. There is recognition of the need to extend provincial conferences to regions as regional conferences.

71287 Potomac Planning Task Force. THE POTOMAC. A REPORT ON ITS IMPERILED FUTURE AND A GUIDE FOR ITS ORDERLY DEVELOPMENT. Washington, Govt. Print. Off. 103p. 1967. Maps, illus., photos.

The Potomac, a microcosm of America, is a historic river with a scenic landscape. Because of its importance, President Johnson appointed an interdisciplinary 11-man Potomac Planning Task Force. It is composed of architects, geographers, planners, an editor and an engineer. This Task Force investigated ways and means to clean up the river, protect its natural beauty provide adequate recreaction facilities and devise a land-use pattern to preserve its natural setting. The Task Force recommended that all three parts of the Potomac area—the river, the riverside, and the setting—be included under the designation of the Potomac River National Landscape. It advocated a complete ecological inventory and the strategic use of zoning as well as development of new towns along the River. In addition, the Task Force recommended that Congress establish a Potomac River Development Foundation. The report gives definitive guidance for the future development and enhancement of the Potomac River and its environs. TC425 P8P8

71288 Potomac River Basin Advisory Committee. POTOMAC RIVER BASIN COMPACT. PRELIMINARY DRAFT. Washington, D.C. 77p. 1967.

The proposed Interstate-Federal Compact recommended to the District of Columbia Commissioners and the Governors of Maryland, Virginia, West Virginia, and Pennsylvania, is summarized in this preliminary draft. Primarily, the Compact would create and implement a Commission for the planning, development, management, conservation, use, and control of the water resources of the Potomac River basin.

71289 Prezioso, S.J. Proposed Adirondack Mountains National Park. PARKS RECREAT. 2(11):14-16, 49-51, Nov. 1967. Map, photos.

A National Park in the Adirondack Mountains of New York would strengthen the whole National Park System because of the proximity to some of the largest population centers in the country. The article presents excerpts from the report prepared for Laurance Rockefeller, who submitted it to the Govenor of New York and Secretary of the Interior.

71290 Progress 1966. NATURE CONSERV. NEWS, 17(1):3-8, Spring 1967. Photos.

Listed as an urgent necessity to our times, conservation activities of the Nature Conservancy in the various States across the nation are reviewed. Highlights for 1966 include: addition of 46 new projects; acquisition of 6,000 acres of land; a full time president with expanded office and field forces; addition of 2,400 new members

71291 A proposed alternative to the Great Smokies Transmountain Road. NAT. PARKS MAG. 41(236):19, May 1967. Map.

Conservationists oppose Park Service plans to construct an additional transmountain highway across the backbone of the Great Smokies. The Carolina Mountain Club and the Smoky Mountains Hiking Club propose alternative routes.

71292 Pryde, P.R. The first Soviet national park. NAT. PARKS MAG. 41 (235):20-23, Apr. 1967. Ref., map, photos.

Plans to establish the Lake Baykal National Park on the shores of Lake Baykal in Eastern Siberia are outlined and described.

71293 Pyfer, A.A. Oregon beautification project. NAT. GARD. 38(9-10): 22-23, Sept.-Oct. 1967. Photos.

The city of Corvallis, Oreg., widened one of the main original roads. To replace the trees that were cut down, one of the local garden clubs helped to coordinate a street tree-planting program for tree replacement. Professional guidance was obtained and criteria were stated.

71294 Rahenkamp, J. Valley reserves for megalopolis. LANDS. ARCHITECT.

58(1):22-24, Oct. 1967. Maps, illus.

This is a presentation of a relatively new housing project concept which combines townhouse living with a favorable blend of forest surroundings. The area is Valley Run, on the Pennsylvania-Delaware border. The schematic site plan group dwellings are under quasi-public management and encourage group living around open space without destroying natural areas.

71295 Ramsey, C. Texotic lineup. TEX. PARKS WILDL. 25(4):3-7, Apr. 1967. Illus.

A statewide census conducted in 1966 by the Texas Parks and Wildlife Dept. disclosed 13 species of exotic animal species with a population close to 30,000. Future introductions and expansion of population appear probable. The paper discusses the problems of a managed ecology, the habitat, and pertinent State game laws.

71296 Rankin, B. Campsites from scarred lands. Ugly strip mines are transformed into recreation areas. BET. CAMP. 8(9):20-22, Nov.-Dec. 1967. Photos.

The Ohio Power Company converted an abandoned strip mine to a recreation area through tree plantings and proper cultivation of the land. Today the reclaimed area boasts 250 lakes and 8 campgrounds.

71297 Redford, P. Vanishing tidelands. ATLANT. MON. 219(6):75-78, 83, June 1967.

This is a thorough discussion of the values of, and threats to, the tidelands of America. Most of our fish spawn or hatch or spend some portion of their lives in this estuarine environment. A natural barrier, the tidelands are also important as a margin of safety against hurricanes and other major storms. Tideland preservation steps must be taken soon, before one of our most important natural resources is polluted and dredged beyond redemption. Legislation is needed at the Federal level. The passage of H.R. 25 on estuarine areas, sponsored by Rep. John D. Dingell of Michigan, is strongly urged. The tidelands should be administered as an ecological unit. In several ways, by scenic easements, agreements with the States, leasing, and Federal management of State and private property in the tidelands region, America may begin to preserve this endangered natural resource.

71298 Reid, G.W. Water quality management. A review of some fundamental principles and proposals. WAT. WASTES ENG. 4(11):50-51, Nov. 1967.

With increasing water requirements, pollution abatement offers the most economical source of additional water supply. Water quality management requires systems analysis on pollution abatement and stream flow. This article proposes five equations for depicting optimal treatment and stream flow to support the population growth.

71299 Reid, L.E., Jr. REMARKS AT THE 19th ANNUAL MEETING OF THE NATIONAL FOREST RECREATION ASSOCIATION, NOV.8, 1967, MORRO BAY, CALIFORNIA. Washington, D.C. 8p. 1967.

The rising participation in outdoor recreation of recent years has resulted in the expanded use of concessions at Federal recreation areas. Within each Federal agency with concession contracts, various policies have grown as the need arose. There did not exist any common policies governing concessions on all federal lands. In 1965, P.L. 89-249 wrote into law the existing National Park Service policy on their concession areas. However, establishing concession policy for one department alone was believed insufficient, since the Department of Agriculture and the Corps of Engineers have concession contracts, too. Upon request of President Johnson, the Bureau of the Budget made a Study of Concessions on Federal Lands Available for Public Recreation, with their recommendations for improving the present concessioner system. The President then directed the Federal agencies with concessions contracts to report back to him through the President's Council on Recreation and Natural Beauty. The steps of the Council's Interagency Task Force, the Bureau of Outdoor Recreation, and other concerned Federal agencies to improve the system that governs concessions on all Federal lands are presented.

71300 Reigner, I.C. Effect of recreation on water quality. In: Municipal Watershed Management Symposium, Amherst, Nov. 9-10, 1965. PROCEEDINGS. Amherst, Univ. of Mass. Cooperative Extension Service, p.49-55, 1967. Ref. (Univ. of Mass. Holdsworth Natural Resources Center. Planning and resource development series no. 4).

A research forester, U.S. Forest Service, Dr. Reigner discusses the effect of various types of recreaction activities on city water-supply reservoirs. Some case histories from New England, Kirksville, Mo., Baltimore, Md., and San Diego, Calif. are summarized. From these experiences it was shown that recreation did not have a serious degrading effect on the quality of municipal water supplies, but the determined efforts of the water purveyors to minimize or even prohibit recreation on watersheds or reservoirs resulted in good water quality. Two appendices were included. Appendix I contained the American Water Works Association's statement of policy on recreational use of domestic water supply reservoirs. Appendix II included the final report of the New England Water Works Association on recreational use of water supplies. HC103.7 M42 no. 4

71301 Reigner, I.C., Ningard, L.G. Baltimore's watersheds: an example of integrated land use. AMER. W. WAT. WORKS ASS. J. 59(11):1469-1477, Nov. 1967. Ref., map, photos.

Baltimore's multiple-use reservoir system provides three major uses: water supply; logging; recreation. Fishing, water sports, picnicking, hunting and other outdoor recreation facilities are included. Research projects are underway for improved watershed management. But the main thrust is still on maintainece of water quality.

71302 Resolutions and policies of the FWOC, 1967. WEST. OUTD. QUART. 34(4): 5-12, Fall 1967.

The 1967 Convention in Portland, Oreg., of the Federation of Western Outdoor Clubs adopted thirty-three resolutions for the preservation of wilderness areas, national forests, national parks, and trails.

71303 Reynolds, J.A. Public disregard, vandalism, littering, increase workload. PARKS RECREAT. 2(10):39-40, 50. Oct. 1967.

Park maintenance has become more costly as workloads increase because of greater use of areas, vandalism, thoughtless littering and dumping on public property. In order to operate efficiently, certain kinds of equipment and types of materials are needed. A list of these is given.

71304 Richards, J.H. Gross aspects of planning and outdoor recreation with particular reference to Saskatchewan. CAN. GEOGR. (2):117-123, 1967. Table.

Serious planning must involve all levels of government and must be a reasonable interpretation of public need. One need is seen in present recreation demands which stress immediate nearness to urban centers. These demands have been ignored for several reasons. Planning is hindered by a lack of research.

71305 Richards, L.M. Small craft harbors in California. SHORE BEACH, 35(1):8-12, Apr. 1967. Map.

The Director of the California Dept. of Harbors and Watercrafts reports on developments along the State's coast. Since 1957, the Dept. has funded $20 million for small craft harbor development. This included boating facilities in urban areas to provide for the immense increase of recreational boats. As existing protected harbors are expanded, every effort to protect the natural shoreline and to provide features to enhance rather than detract from the natural environment should be made.

71306 Roberts, E. From the Editor, EXPLOR. J. 45(2):77, 114, June 1967. Photo.

The editor asks the question: "Is there a legacy for tomorrow?" The disposition of America's natural heritage is questioned. All Americans are asked to consider seriously the urgent need for sound conservation practices.

71307 Roberts, E. G. The National Registry of Natural Landmarks. J. FOREST. 65(10):731, Oct. 1967.

A short description is given of the Federal program named in the title of this article. Criteria for national landmarks are discussed, and examples are provided of several of the areas which have been registered since the program began in 1964.

71308 Roberts, P. Seashore State Park. PARKS RECREAT. 2(12):10-13, 46, Dec. 1967. Illus., photos.

The approved master plan for Virginia's Seashore Park strives to accommodate visitors and yet preserve natural areas. Recreation facilities will include playgrounds, a Visitor Center, with exhibits and assembly room, and an electric view-train.

71309 Rock, M.A. "We expect to win." NAT. PARKS MAG. 41(237):12-13, June 1967. Photos.

This is the story of the efforts of a group of conservationists to save a small oasis of wilderness called Mason Neck, a 13-square mile bootshaped peninsula which juts into the Potomac River in Fairfax County, Virginia, from developers who plan mass housing developments. The marsh is a nesting place for the bald eagle and 200 other species of birds visit or nest there.

71310 Roe, R.A. Conservation environmental renewal program. N.J. OUTD. 18(3):7, 14-17. Sept. 1967. Map.

The New Jersey Conservation Environmental Renewal Program is reputed to be the finest such program in the Nation. In this statewide program, reports the Commissioner of the N.J. Dept. of Conservation and Economic Development, the State is a working partner with the cities and counties in establishing the Skylands region – a 150-square-mile preserve of 100,000 acres in northern New Jersey. The first phase of the program was completed with the purchase of 140,918 acres of open space land. The projection of the second phase estimates the need to buy an additional 90,000 acres, the necessity for the optimum yield of natural resources, and the preservation in particular of potential reservoir sites.

71311 Roe, R.A. Skylands of New Jersey. PARKS RECREAT. 2(9):17, 61, Sept. 1967. Photo.

To insure open space and protection of its natural resources from encroaching urban areas, New Jersey has initiated a Conservation Environmental Renewal Program. Eventually 100,000 acres will be developed into the "Skylands of New Jersey"—an inter-regional public land preserve in the north-central part of the State. Plans for future development are proposed.

71312 Rose, E.T. Quality water. All life needs it. IOWA CONSERV. 26(1): 1, 4-5, Jan. 1967. Photos.

The Federal Government program to improve the Nation's water quality is discussed along with the plans and activities of the State of Iowa. In the total number of fish killed in 1965, Iowa ranked sixth in the nation—exceeded only by California, Connecticut, Ohio, Oklahoma, and Pennsylvania. Water which does not support good quantities of game fish on a year-round basis is an indication that a most vital resource is being mismanaged. The presence of good populations of high quality game fish in a body of water is a biological indication of water fit for many human needs. The recreation uses of Iowa streams are increasing every year. Fishing, swimming, boating, and water skiing have become a way of life for a majority of Iowans. The need for high quality water for municipal and industrial uses is also increasing as Iowa becomes more urbanized. The Iowa Water Pollution Control Commission has developed water quality standards to cope with the paradox of greater demand for higher quality water and the increased sources of pollution which accompany an expanding economy.

71313 Rosien, A.H. The National Park Service. Audio-visuals for interpretation. INDUSTR. PHOTOGR. 16(5):26-27, 67-69, May 1967. Photos.

The Branch of Motion Picture and Audio-Visual Services of the Division of Interpretation has the responsibility of producing materials which will enable the visitor to gain insight and understanding prior to and during his visits to the national parks. The work of the Branch staff includes preparation of slides, editing scripts, audio-recording, shooting motion pictures, and the selection and maintenance of all audio-visual equipment for the entire National Park System.

71314 Rosien, A.H. The National Park Service. Information and inspiration. INDUSTR. PHOTOGR. 16(5):22-25, 62, 64, 66, May 1967. Photos.

The organization and work of the NPS Branch of Press Relations are described. These staff members are backed up in the field by the added photographic services of personnel in various National Park Service areas. Photographic duties are often assigned to a park naturalist or historian. Lending services are available to the media from the photographic collection. Present uses of these photographs are for such purposes as reports, budget studies, special task force reports, beautification programs, conservation programs, studies of possible new national parks and recreation areas, inquiries from Congress, and in publications of other government agencies.

71315 Rosien, A.H. The National Park Service. Photography: the challenge. INDUSTR. PHOTOGR. 16(5):20-21, 60, 62, May 1967. Photos.

In the National Park Service, photography is a quality tool which both internally and externally serves to inform, interpret and add to a collective understanding of our national heritage and resources. The history of the art in the Service and some new developments are described.

71316 Rudolf, P.O. Silviculture for recreation area management. J. FOREST. 65(6):385-390, June 1967. Ref., photos.

Forest management practices can be suitable to the use of forest land for recreation purposes. Various methods of silvicultural practices applied to recreation areas are analyzed.

71317 Rural recreation sites. PARKS RECREAT. 2(10):41, 68-70, Oct. 1967. Photos.

Because of the influx of population to the cities and its depressing effect on the rural economy, the Dept. of Agriculture's Rural Electrification Administration is assisting the lagging economy in rural America by financing electric and telephone systems which enhance the recreation potentials of their areas. Development of the rural economy serves two purposes: (1) to halt rural migration, and (2) to provide more recreation facilities.

71318 Samuelson, R.J. Redwood Park: squabbling on details delays final agreement. SCIENCE, 157(3787):410, July 28, 1967.

The establishment of a Redwood National Park has been hindered because of disagreement between the State of California and the Federal Government. This article outlines the areas of conflict and proposals recommended by various groups.

71319 Santoro, J.T. Training of

waterfront personnel. CAMP. MAG. 39(4):19-20, Apr. 1967. Photo.

In-service training of the camp's aquatic personnel is most important. Always taught are Red Cross water safety skills, boating rescues, and first aid. This article gives techniques and advice on the training program.

71320 Sargent, F.O. SCENERY CLASSIFICATION. Burlington, Vt., Agricultural Experiment Station. 28p. 1967. Maps, illus., photos., tables. (Vermont Resources Research Center. Report 18).

By a detailed, developed, and illustrated presentation of a Scenery Classification System, this report provides the steps in classifying scenery for planning purposes. The System is explained by giving a definition of each rating factor and measurement - distance, variety, depth, width, and intermittency - showing how they are combined and mapped, and then providing examples of ways in which the classification system can be used to solve a number of specific scenery planning problems. The data and methods developed in this study have been used for planning in one town and their use is being considered by other planning groups.

71321 Satterthwaite, A., Tippy, R. REPORT ON THE PEARL RIVER, MISSISSIPPI. Washington, D.C., Conservation Foundation. 9p. 1967.

This report supports the proposal to make the Pearl River which flows 408 miles from its headquarters in Central Mississippi into the Gulf of Mexico, an official recreational boatway. The River has remained relatively unpolluted. It has potential for swimming, boating, and fishing. Location, physical condition, and accessibility combine to create a wider than local use for Pearl River. Ten questions for further consideration are raised and possible solutions are offered.

71322 Sayers, P.R. Pointers and portents to parks of the future. PARK ADMIN. 32(12):22-25, Dec. 1967. Maps, photos.

The city of Liverpool, England held a park design contest for a bleak area devoid of topsoil. The winning design was an action-packed masterpiece and included facilities for every age group and all types of recreation activity. Existing parks should be readapted to the needs of the present based on surveys of recreation interests.

71323 Schaefer, D. Bolton Valley: a new idea in outdoor-indoor living designed for one of the newly developed major Vermont ski areas. VT. LIFE, 22(2):22-25, Winter 1967. Photos.

The ski lodge at Bolton Valley, Vermont is designed to give the feeling of involvement with all outdoors. A "recreational environment" is planned for the entire 8,000-acre valley for year-round activities.

71324 Schaefer, V.J. Something in the air. UNIV. REV. 1(3):2-7, Summer 1967. Photos.

Americans are becoming increasingly more aware that a polluted atmospheric haze can be a deadly contaminant to one of our most basic natural resources - the air around us. This article provides a detailed discussion of the air pollution problem, the research that is being conducted in various regions of the Nation, and some recommendations for solutions.

71325 Schick, H., Asner, E. Philadelphia: 100 years for Fairmont Park while latest vest pocket park marks 1 year. PARK MAINTEN. 20(10): 26-28, Oct. 1967.

As Philadelphia celebrates the hundredth anniversary of Farimont Park, the city is initiating a new concept in park development of vest pocket parks. The vest pocket parks are created in blighted areas where buildings have been razed. Residents are encouraged to participate in the planning and construction of the new, small parks where children play in safer areas with imaginative and creative play equipment.

71326 Schmidt, V. Mammoth Cave self-guiding tour. NSS NEWS, 25(4): 84-85, Apr. 1967. Photos.

As an experiment in the Summer 1966, the National Park Service substituted self-guided tours of the historic route for the regular conducted tours. The self-guided tours were run continuously during the day. At points along the route, rangers were stationed to answer questions and provide protection for the Cave. This article discusses the advantages and disadvantages of the self-guided tours.

71327 Schoch, G.A. Happiness is a planned street tree program. PARK MAINTEN. 20(6):22-23, June 1967. Photos.

To beautify the community many cities are adopting a Master Tree Plan which provides for appropriate trees along the streets.

71328 Schubert, T. Hunting, fishing, and license fees. COLO. OUTD. 16(4): 1-4, July-Aug. 1967. Table.

The most important pieces of game and fish legislation to be presented in the Colorado State Legislature in 20 years were five bills introduced in the 1967 session that embodied the whole scope of increases for game and fish licenses. This article is a reprint in its entirety of the final persuasive effort given to the House by Representative Ted Schubert before the final vote was taken. His speech is credited with convincing the majority.

71329 Scott, D.W. Nature centers - A story of Seven Ponds. AUDUBON, 69(5):82, Sept.-Oct. 1967. Photo.

The article discusses the development of the 100-acre Seven Ponds Nature Center located 40 miles north of Detroit. The site was donated to the Michigan Audubon Society in 1967 and since that time has been extensively developed. A full time professional staff, with the aid of volunteer help, has designed and is operating a nature education program.

71330 Scott, J.R. Commentary from an Ontario Perspective.II. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p.65-68, 1967.

The need for assistance from private park developers to provide necessary facilities with the available dollars and ways of helping them are discussed.

71331 Seavey, J. Wreck-reation, re-creation, recreation. MICH. CONSERV. 36(6):12-18, Nov.-Dec. 1967. Illus., photos.

The Chief of Michigan's Recreation Services Division tells how the State's Dept. of Conservation has entered the area of urban recreation and by assisting urban dwellers to experience the simple joys of good play will alleviate some social problems. There is a real need of recreation for underprivileged people. Portable play equipment which could be moved from place to place throughout the year would serve wide-ranging ends and stretch the recreation dollar.

71332 See new Disney Park by '70. AMUSE. BUS. 79(13):7, Apr. 8, 1967.

Plans for construction of Disney World near Orlando, Fla. in 1968 were announced by Roy O. Disney, President of the Walt Disney Productions. Dates for completion and opening of the park by 1970-1971 were projected contingent upon favorable legislative action by the State of Florida. Funding and costs were discussed.

71333 Seed, A.H., Jr. To keep America beautiful - start the habit early. TRENDS PARKS RECREAT. 4(2):8-10, Apr. 1967. Photos.

A recent study has shown that litterbugs are people with bad habits. To help prevent these careless habits from developing, Keep America Beautiful, Inc. has instituted a number of programs for school children. A number of existing organizations such as Campfire Girls, Boys' Club of America, Boy Scouts, and high school student councils have joined in the effort. Law enforcement and the use of fines should be used as stronger measures.

71334 Senge, T. National parks of Japan. TRENDS PARKS RECREAT. 4(4): 30-32, Oct. 1967. Photos.

The Japanese have long been lovers of nature with natural scenery that extends from the tropical and sub-tropical to the frigid zone. Although the national park system in Japan was established in 1931, development of parks to preserve some of the country's outstanding natural attractions as well as to provide the people with new opportunities for recreation has made significant progress during the 36 years since its inception. Statistics on the number of parks, the various types and ownership are reported.

71335 Sessoms, H.D. Education for recreation and park professionals. PARKS RECREAT. 2(12):29-30, 51, Dec. 1967. Illus.

According to a survey by the Society of Park and Recreation Educators, of universities offering a park-recreation program, there has been a rapid growth in the number of educators, schools, and students majoring in park and recreation curricula. However, the student - teacher ratio, 21 park and recreation majors for each educator, is higher than the national average, 14 to 1. Park-recreation education shows regional variations in development. Departments or Schools of Physical Education and Recreation administer most of the programs.

71336 Shafer, E.L. Forest aesthetics - a focal point in multiple-use management and research. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA, 7(26):47-71, 1967. Ref., photos.

This paper attempts to point up some of the challenges that face the resource manager in his efforts to cope with the problems of timber-aesthetics management, and to suggest guidelines for multiple-use management and research where both timber production and forest aesthetics are important. The author suggests one of the objectives of research should be to determine if recreationists can detect a significant aesthetic difference between forest stands that have or have not been subjected to different kinds of cutting a certain number of years ago. "Results from research of this kind will help to establish guideposts for one of today's most important resource-management problems."

71337 Siehl, G.H. MINED LAND RECLAMATION REQUIREMENTS: PRO AND CON. Washington, Library of Congress. 34p. 1967. Ref.

This is a report on the recent legislative and administrative history, benefits, and negative effects of mined land reclamation. Current legislation on strip mine reclamation is summarized with supporting arguments and opposing statements.

71338 Simmons, I.G. Outdoor recreation as a land use in the U.S.A. TIJDSCHR. VOOR ECON. EN SOC. GEOGR. 58:183-192, July-Aug. 1967. Ref. map, illus., tables.

A British professor and research Fellow of the American Council of Learned Societies reports on the effects of outdoor recreation by Americans upon the land and landscape of the United States. Americans spend millions of dollars each year on such rural outdoor pursuits as driving, camping, fishing and hunting, picnics, sailing, swimming, hiking and sightseeing. Public provision for outdoor recreation is compared with other land uses and private provision for outdoor recreation is also discussed. In addition some difficulties of the present situation, administrative action by Federal and State governments, and long-term prospects for outdoor recreation in America are considered.

71339 Simmons, N.M. Refuge in a wilderness. EXPLOR. J. 45(2):127-133, June 1967. Ref., maps, photos.

A historical sketch is given of the Cabeza Prieta Game Range in Arizona with emphasis on the activities that have taken place since the 8th century B.C. The U.S. Bureau of Sport Fisheries and Wildlife, endangered species, and game ranges are discussed. Congressmen and National Park Planners are considering the combination of the Game Range and Organ Pipe Cactus National Monument into the largest national park in the U.S.

71340 Simpson, C.D., Jackman, E.R. BLAZING FOREST TRAILS. Caldwell, Idaho, Caxton Printers. 384p. 1967. Maps, photos.

This book tells the story of the U.S. Forest Service and the nation's forests. Homesteading anecdotes, the training of foresters, the program of land consolidation and government acquisition, logging practices, and the economic and aesthetic values of forests are given. Recreational uses of the forests are depicted and include hiking, riding, skiing and rock hunting. Included in the appendix are the accredited schools of forestry, forestry curriculum, logger's lingo, and national forest regions with a list of the national forests.

71341 Slansky, C.M. Nuclear power and conservation. WEST. OUTD. QUART. 34(1):4-7, Winter 1967. Tables.

The importance of nuclear fuels as a source of energy for electric power is stressed. Two great advantages of this power over hydro-electric power and fossil fuels are that they do not pollute the atmosphere and make possible the conservation of scenic areas and wild rivers.

71342 Smith, A.W. Mess on the Potomac. NAT. PARKS MAG. 41(235):2, 12, Apr. 1967. Photo.

The editor views with alarm the interagency cooperation and interim reports on a Model Program for the Potomac River. A recommendation is made for a top-level review of the entire problem by generalists of wide experience, men without operating agency connections, and with no purposes but the public interest.

71343 Smith, C.L. Don't limit your city pools. SWIM. POOL AGE, 41(11): 18-19, Nov. 1967. Photos.

A fiberglassed beam placed on jacks and rolled into place on wheel dollys can provide a starting platform and turning wall in swimming pools.

71344 Smith, D.G. Private vs. public campgrounds. TRAIL. LIFE, 27(5): 30, 53-57, May 1967.

Among ideas presented at the Fourth Annual All-Industry Recreational Vehicle Seminar held in Denver, Colorado, December 1-2, 1966, the author takes exception to the recommendation that "raising charges and fees for use of public campgrounds could create a good financial atmosphere for private facilities." Alternative suggestions are discussed.

71345 Smith, J.A. A challenge to 'at-retirement' park and recreation professionals. PARK ADMIN. 32(12): 35, Dec. 1967.

Retiring park and recreation professionals may extend their services by acting as consultants in planning parks in foreign countries. These remarks were presented at the Canadian Symposium of Recreation, Man and his leisure, Expo '67, Montreal.

71346 Smith, J.A. Park and recreation meeting makes waves. AMER. CITY, 82 (8):90-92, Aug. 1967. Photos.

This synopsis of the Third World Recreation Congress at Brighton, England includes a description of recreational facilities and tours. New concepts for intensive use of land for recreation in crowded urban areas were presented.

71347 Smith, P.M. Some problems and opportunities at Mammoth Cave National Park. NAT. PARKS MAG. 41(233):14-19, Feb. 1967. Photos.

A great cave preservation is examined by a scientist who outlines its history and problems. He concludes that the maintenance of its geographic and geologic unity will require cooperative regional planning.

71348 Snyder, J. Air carriers move into innkeeping. HOT. MOT. MANAGE. 182(7):22-26, July 1967. Illus.

Although the involvement of airlines in hotel business is not new, there is a dramatic new trend for airlines to own or manage hotels. The expanding domestic air-traffic may overtake the growth of hotels and motels, so airlines may plan their own passenger accommodations. Other reasons for moving into the hotel business are diversification, the opportunity to offer a broader range of services, and the already existing links between airlines and lodging facilities.

71349 Society of American Foresters. Northern California Section. The Redwood Park proposals. J. FOREST. 65(5):306-311, May 1967. Photos.

Although the SAF has taken no official position on the Redwood Park proposals the Policy Committee of its Northern California Section made an extensive study to acquire basic facts. In an objective approach the questions raised in the conflict were examined and answers submitted here. As a result of these conclusions, four recommendations for action are proposed.

71350 Solberg, E.D. THE WHY AND HOW OF RURAL ZONING. Washington, Govt. Print. Off. 58p. 1967. Ref., illus., photos. (U.S. Dept. of Agriculture. Information Bull. no. 196).

An overall picture is presented of the progress of zoning in the U.S. The various kinds of zoning regulations, how they are used, their purposes and benefits to the community are discussed. Rural zoning divides a community into suitable districts by local laws to regulate: (1) "use"; (2) "building tract"; (3) "building size" structures; and (4) density of population. The bulletin describes the legal tools to guide the future growth of agricultural, residential, business, forestry, and other uses of land. These include the comprehensive plan for long-range physical development of the community, subdivision control, building codes, and plumbing codes.
S21 A74 no. 196

71351 Southeastern Association of Game and Fish Commissioners. PROCEEDINGS, 18th annual conference, 1964. Columbia, S. C. 584p. 1967. Ref., illus., photos., tables.

Selected reports within the Proceedings are abstracted separately. These include: McCartney, R.B., "Field Management for Public Dove Hunting in the United States"; Taylor, C.O., "Methods and Techniques, Norris Reservoir Sport Fishing Survey, 1963"; Mathis, W.P., "An Attempt to Improve Stream Fishing by Manipulating the Lakes in the Stream Basin"; and White, J., "A Report on Florida's Boating Law after Two Years Operation."
SK351 S7 1964

71352 Southeastern Association of Game and Fish Commissioners, PROCEEDINGS, 20th annual conference, 1966. Columbia, S.C. 493p. 1967. Ref., illus., photos., tables.

Selected reports within the Proceedings are abstracted separately. These include: A Survey of Private and Commercial Shooting Preserves in Tennessee by Chester A. McConnell, Cost

Analyses of Sport Fishing in Commercial Catfish Ponds by Joseph H. Elrod and John R. Kelley, Jr., Progress Report of Virginia's Trout Fee-Fishing Program by Charles H. Peery, and Sport Fishery Statistics from the Inland Waters of North Carolina by Frederic F. Fish. SK361 S7 1966

71353 Spengler, J.J. Megalopolis: Resource conserver or resource waster. NATUR. RESOURC. J. 7(3):376-395, July 1967. Ref.

The author is concerned with two questions: how does increase in city size affect the per capita availability of "resources"; and how does increase in city size affect the administration of these resources? Primary emphasis is given to the resources of time and suitably situated space in the urban environment. There seems to be a positive correlation between size of city and amount of living space, and amount of time available for various activities.

71354 Sperry, K. North Cascades National Park: copper mining vs. conservation. SCIENCE, 157(3792): 1021-1024, Sept. 1967. Map.

Conservationists have strongly opposed the Kennecott Copper Corporation's operation of an open-pit mine in the Glacier Peak Wilderness Area of Washington. Proposed legislation to permit Federal agencies to establish a North Cascades National Park is being considered but presents major policy problems regarding jurisdiction of various Federal agencies.

71355 State-by-State game laws compiled by the Dealer. SPORT. GOODS DEAL. 136(6):222, 224-229, Sept. 1967.

This article summarizes 1967 hunting laws in the various States.

71356 State legislatures hold key to tourist promotion. RESORT. MANAGE. 21(8):24-25, Aug. 1967.

This article explains why State legislatures don't spend much money in promoting tourism. Each State, some of the neighboring areas, including a few Canadian provinces, Mexico, and several Caribbean Islands are listed with their advertising budgets and agency responsible for tourist promotion.

71358 Stoddart, L.A. What is range management? J. RANGE MANAGE. 20(5): 304-307, Sept. 1967.

Water quality control cannot be continued in the future at its present level under the regulatory system of control in practice today. Instead there must be developed and executed a master water resource management plan.

71358 Stoddart, L.A. What is range management? J. RANGE MANAGE. 20(5): 304-307, Sept. 1967.

Range management is defined. Changes occurring in the West necessitate the inclusion of recreation as a land product. Picnicking, sightseeing, and fishing are recreation uses of ranch land.

71359 Stoevener, H.H., Sokoloski, A., A. ESTIMATION OF THE MAGNITUDE AND DISTRIBUTION OF BENEFITS FROM RECREATIONAL RESOURCE MANAGEMENT IN THE ECONOMY OF A SMALL AREA. Corvallis, Oregon State Univ. 19p. 1967. Ref., map, tables.

A study was made in the region surrounding the Yaquina River estuary of Oregon. This paper reports some preliminary empirical results from the study about water quality economics. In order to link water quality management to recreational values, the report points out the technical relationships between waste disposal and fishing success. Where recreational values should be reflected in the decision-making process is specified. In addition to recreation values, local area income effects connected with alternative resource management schemes are considered.

71360 Stone, E.C. The Redwood Park proposals. J. FOREST. 65(5):320-321, May 1967. Photo.

Dr. Stone is a forest ecologist at the University of California in Berkeley. He repudiates interpretations presented in several publications of his statements about the effect on the redwood stands if the species were protected by establishing a Redwood National Park. He suggests that the park manager's tools are fire, herbicides and the chain saw. In his summary remarks at the Symposium on Management for Park Preservation, May 13-14, 1966, Dr. Stone repeats his approximation of what is happening to vegetation under the protection program and what must be done to maintain the redwood as a dominant species.

71361 Stroud, R.H. Environmental quality: costs versus benefits. BULL. ECOL. SOC. AMER. 48(2):47-49, Summer 1967.

"The cost of preserving our environmental quality will have to be measured against the long-term benefits accruing there-from. Whether dealing with renewable biological resources or less tangible esthetics, ecologists and conservationists will be required to justify their demands in part on economics. An excellent example of an analysis of the true long-term values of a biological resource vs. short gains" is shown in this article. Statistics from the Galveston-Trinity-East Bay-estuarine complex prove the recreation use for sport fishing outweighs the commercial use by 36 times the economic value as a source of limestone aggregate and calcium.

71362 Strzygowski, W. Die Wiederbewaldung der Kusten Griechenlands, eine Voraussetzung der Steigerung des Tourismus und damit kunftig wichtigsten Einkommensquelle. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA, 7(26):362-381, 1967. Ref.

The reforestation of the coast of Greece, a necessity for the increase of tourism and the most important future source of income. (translation of title)

71363 Stucker, G. F. The Mullica: river of iron. NAT. PARKS MAG. 41 (240):10-15, Sept. 1967. Map, photos.

Recommendations are made by the New Jersey Audubon Society, Pine Barrens Conservationists and Wildlife Preserves Inc., for the establishment of a Pine Barrens National Monument. Legislation to place Mullica River (a waterway in the Pine Barrens), under Federal protection, would preserve the area's natural history. A brief account is given of the early development of the iron works and use of the natural raw materials of the area. Proximity to New York City metropolitan region, abundance of wildlife, and relaxing atmosphere makes the unspoiled wilderness attractive to recreationists.

71364 Swanton, E.M. No recreation space available. TRENDS PARKS RECREAT. 4(3):13-15, July 1967. Illus., photos.

Because of the population explosion there is as severe a recreation space shortage in the suburbs as in the crowded metropolis. One township near New York City solved its problem by approaching the School Board and requesting it to develop recreation facilities within the school yard for a community program. Private business was also approached and encouraged to permit the use of parking areas and windowless exterior walls for play areas after hours when the stores closed.

71365 Swearingen, W.C. Outdoor recreation, present-past-future. In: National Reclamation Association. COMPENDIUM, 36th annual convention, 1967. Honolulu, p.176-181, 1967.

Outdoor recreation is the third largest industry in the U.S., and continues to grow. There is a shortage of recreational facilities. The author discusses recreation problems current in Texas, but declares his remarks may be applicable to lakes and reservoirs anywhere in the nation. Some of the major points in recommendations submitted by a special 9-man committee appointed by the Governor to examine present and future needs of Texans for water-oriented outdoor recreation are summarized.
TC801 N3 1967

71366 Swift, E. Mesabi myopia. CONSERV. NEWS, 32(24):2-4, Dec. 15, 1967.

The building of a processing plant on the shore of Lake Superior to dump the powdered rock from the treated iron ore of the Mesabi Range has caused water pollution which has affected fish and tours on Lake Superior for many miles. Reasons which have been disproved for the construction of the plant are enumerated.

71367 Swift, E. Strained resources and the good life. Part I. CONSERV. NEWS, 32(16):1-4, Aug. 15, 1967.

Man's abuse of the natural resources causes many problems today. Man is now questioning his blind faith in the continuance of the resources as an expanding population puts greater pressure on these resources. Caution and common sense have failed to keep pace with technological advances.

71368 Swift, E. Strained resources. Part II. FLA. WILDL. 21(7):31-32, Dec. 1967. Photos.

The state of our Nation's natural resources is ignored at our peril. Shortsighted industrial growth has already polluted the Hudson, Connecticut, Mississippi and Ohio Rivers as well as the San Francisco Bay and numerous lakes and streams. Forest reserves have been exploited. Bleak land scars have resulted from surface mining in Indiana, West Virginia, Kentucky and Pennsylvania. Junkyards litter the once-scenic American landscape. Our air is becoming polluted. How far can our economy continue at its present pace without irreparable damage to our natural resources.

71369 Swift, E. Strained resources

and the good life. Part III. CONSERV. NEWS, 32(18):1-4, Sept. 15, 1967.

Our economy thrives on the throw-away philosophy which is defended by both economists and recreationists. The recreationist wants the material goods provided by the industrialist; he will not risk his financial situation by an intensive campaign to curb the industrialist's abuse of the resources.

71370 Swift, E. Strained resources and the good life. Part IV. CONSERV. NEWS, 32(19):1-4, Oct. 1, 1967.

Conservation is becoming the province of sociologists and scientists whose only interest in natural phenomena is its effect on the human race. A basic concern for resources themselves is often lacking. This callousness can be related to a general paucity of individual thinking today. Our society is controlled by technological and economic values at the expense of the moral or humanistic values.

71371 Swift, E. Strained resources and the good life. Part V. CONSERV. NEWS, 32(20):1-4, Oct. 15, 1967.

Resource conservation generally is among the first of services cut when budgets are reduced; some public officials consider pollution abatement a "frill". The issue is really one of priorities. The United States has great material wealth. Americans must be willing to forego some of their pleasure activities and concentrate on saving the nation's natural life. Instead of merely using resources, more sportsmen should devote time to the preservation of these resources.

71372 Tandy, C.R.V. Landscape treatment of space between buildings. PARK ADMIN. 32(8):23-25, Aug. 1967.

Landscape gardening may accomplish many functional ends. This article tells how to use plants as enclosures, dividers, or for simple beautification.

71373 Tarlock, A.D. Preservation of scenic rivers. KY. LAW J. 55(4):745-798, 1967. Ref.

Preservation of free-flowing water is a public value which should be reflected in water-resource planning decisions. Before this can occur, basic changes must be made in the present policy of the law favoring short-term uses of water --- e.g., flood control, power generation, and irrigation. Future needs will best be met by a balanced water policy which accommodates all types of uses, including those which require free-flowing streams. Planning should reflect both economic and non-economic values and should stress multiple use of water resources to serve a society which is becoming more leisure-oriented.

71374 Taylor, G. D. Leisure in new towns. TOWN COUNT. PLAN. 35(1):5-10, Jan. 1967. Photos.

The author discusses the need for long-term recreational planning in new towns. Need for the creation of a carefully studied programme, that can only be done by a professional team working with physical planners, is indicated.

71375 Taylor, G. D. Commentary from an Ontario Perspective.I. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario. p.61-64, 1967.

The author emphasizes that demand for recreation is frequently confused with the use or consumption of recreation. This may result in serious planning errors. There is a growing realization that parks and recreation areas are interrelated with other resources and people. Such a realization forms the basis of a systems approach to planning. There is not enough data on which to base logical decisions on outdoor recreation. Other countries are facing problems similar to those in Canada.

71376 Taylor, W.H. The Quantico conservation story. VA. WILDL. 28(8):10-11, 20-21, Aug. 1967. Photo.

The Marine base at Quantico, Va., has started a system of conservation and wildlife management to keep a sustained yield of game for recreational purposes. A "Cooperative Management Plan for the Conservation and Development of Fish and Wildlife Resources at Marine Corps Schools" has been formulated under authority of Public Laws 85-337 and 86-797. As a result of such policy, the Base has furnished 8000-9000 hunter days of recreation per year since 1962. Service personnel, their families and guests, and limited numbers of civilians by permit are given this recreation opportunity.

71377 Taylor, Z. Boat laws that affect you. SPORTS AFIELD, 157(4): 94-97, Apr. 1967. Photo.

Boating laws are discussed, with explanations of certain general principles. A State guide to boating laws is given.

71378 Textbooks and fishhooks. OUTDOORS, 9(1):24, June 1967. Photos.

Students are learning how to fish in an adult education program offered at Kirkwood, Missouri. Since its inception 5 years ago the course has become one of the most popular. There is a long waiting list of prospective students. Contents of the course are listed.

71379 Thas, J. L'aspect recreatif de la nature en Belgique. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA, 7(26):200-207, 1967. Ref.

Various recreative aspects of nature in Belgium are discussed. These include the development of recreation, legislative measures, and actual situation in the country.

71380 Thiel, F. I., Yasnowsky, J., Jr. Some techniques for evaluating effects of highway beautification. HIGHW. RES. ABSTR. 37(12):29-30, Dec. 1967.

Carrying out the Congressional request for an economic impact study of the Highway Beautification Act has resulted in an overall analysis of the effects of the Act based largely on 25 studies in various States. The impact of the Act was estimated by using (a) study and control area comparisons, (b) before and after period comparisons, (c) industry trend analysis, (d) attitude surveys, (e) case studies, (f) a county input-output model, and (g) analogies from known experience.

71381 Thompson, B.H. Balance and variety in park systems. TRENDS PARKS RECREAT. 4(3):4, July 1967. Photo.

Many park agencies are interested in developing resort areas and have not seen the potential values in preserving the land in its natural state. Time is running against those who are trying to plan, acquire, and protect a balance of area types. Priority must be given to identifying and acquiring the places of greatest intrinsic value. Frederick Olmsted prepared such a plan for California in the 1920's. Today, with decades of experience to build upon and the numerous grants and cooperative programs to build with, all park agencies should be able to plan a comprehensive, balanced park plan.

71382 Thorsell, J.W. Open space for the urban region. ONT. GEOGR. (1): 28-39, Jan. 1967. Ref., map.

The pluralistic concept of open space and the need for systems planning in providing recreation land for the city region are reviewed.

71383 Three plans for Sleeping Bear. MICH. OUT-OF-DOORS, 18(5):6, May 1967. Illus.

Legislation to improve and expand existing State parks by appropriation of Federal funds in the Sleeping Bear Dunes Area was introduced by Congressman Vander-Jagt of Cadillac, Michigan. Identical bills for the establishment of a 61, 171-acre Federally owned park in Leelanau and Benzie Counties were also introduced in Congress by Senator Hart and Representative O'Hara, both of Michigan. Simultaneously, Pierce Stocking, a businessman, announced his intention to develop 1,400 acres of land which he holds in the proposed Federal recreation area. The users' fees, funding and other details of the three proposals are discussed.

71384 Tippy, R. Roads and recreation. KY. LAW. J. 55(4):799-821, 1967.

Since 1916, Federal aid for highway construction has been aimed at utilitarian objectives in applying advanced engineering technology to transportation. The Highway Beautification Act of 1965 represents a new philosophy which recognizes roads as part of the Nation's system of recreation resources. This calls for developing close coordination of transportation and recreation planning, and the refinement of three programs established by the 1965 beautification law – control of billboards, regulation of junkyards, and enhancement of roadside areas.

71385 Tochy, W.H. The world's finest fishery? MICH. CONSERV. 36(3):2-7, May-June 1967. Photos.

The chief of Michigan's Fish Division describes the tremendous fish-producing potential of the Great Lakes. There are plans to release many new species into the Lakes and increase their numbers. The State will develop a major sport fishery on the Great Lakes and in associated rivers.

71386 Tokata, M. Recreational values of fish and wildlife resources and their relationships to water development projects. In: National Reclamation Association. COMPENDIUM, 36th annual convention, 1967. Honolulu, p.170-175, 1967.

Man's effort, technology and knowledge must be directed toward saving the natural resources. As a result of national affluence, more people are looking for quality outdoor recreation, especially in hunting and fishing. The evolution of multiple use water projects adversely affected fish and wildlife. Legislative actions were essential for the protection of fish and wildlife in the planning of water development projects. Some water projects have been advantageous to wildlife.

71387 Towell, W.E. Parks are for people. AMER. FOR. 72(10):5, 55, Oct. 1967.

The National Park Service is faced with administration problems of preservation, park use, management policy, and transportation.

71388 Trefethen, J.B. The terrible lesson of the Kaibab. NAT. WILDL. 5(4):4-9, June-July 1967. Illus., photos.

Through a bitterly learned lesson of overprotection of the mule deer herd on the Kaibab North Plateau, professional wildlife managers today practice a philosophy of game management which recognizes the need for control of deer populations through sport hunting and strict adherence to the principle of natural balance between plants and plant-eaters, predators and prey.

71389 Troyer, W. The Kenai National Moose Range. ALASKA SPORTS. 33(5): 24-28, May 1967. Map, photos.

The Kenai National Moose Range located on the Kenai Peninsula in Alaska, and encompassing 1,765,000 acres was established in 1941 to assure the perpetuation of the giant Kenai moose, other wildlife, and their habitat. This ecologically diverse area, attractive to outdoor enthusiasts, is easily accessible by road to nearly half the population of Alaska. Rapid economic development of the area will demand constant surveillance from conservationists.

71390 Truslow, F.K., Vosburgh, F.G. Threatened glories of Everglades National Park. NAT. GEOGRAPH. 132(4): 508-553, Oct. 1967. Maps, photos.

The Everglades National Park is unique in its wildlife. Because of man's development in southern Florida, however, the natural water supply has been altered and the very existence of the incomparable wildlife has become endangered. The Army Corps of Engineers and the Flood Control District are cognizant of the problem and are searching for solutions. The birds and wildlife of the Park are described in this article.

71391 Tyler, J. Pray for these predators. GA. GAME FISH, 2(2):16, Feb. 1967.

Few people realize the important role of the predatory birds, hawks and owls, who help keep small game populations healthy by eliminating diseased and weak animals. Only 1 to 16% of their total diet consists of rabbits, squirrels, and game birds. Hawks and owls are rapidly being reduced in numbers by hunting and pesticides. To counteract the loss of these valuable predators the General Assembly of Georgia passed a law in 1963 to protect all birds except the crow, English sparrow, and starling.

71392 Tyrrell, T.A.C. The role of the

municipalities in planning and developing outdoor recreation land – the role of government – a panel discussion. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, The Conservation Council of Ontario, p.31-34, 1967.

Municipalities must strive for maximum use of available legislation within the municipality and in the region, a recreation land use policy that applies to all departments and is capable of being understood and administered by the municipalities, and the recognition of recreation as one of the integral parts of the overall planning of committees.

71393 Udall, S.L. Our perilous population implosion. SAT. REV. 50(35): 10-13, Sept. 2, 1967. Illus.

A preview of the American world of tomorrow, if nothing is done about those nightmares of exploding and imploding populations, is presented by the Secretary of the Interior. Annual population growth and continued implosion toward the cities increase the physical and social pressures. For an improved physical and social environment that widens, not narrows, individual choice, application of the conservation concept to the human race is recommended. Without a slow-growth population policy and practice, Americans will find it difficult to eliminate slums, build attractive cities, to expand education, to control crime, and to create a good and just society.

71394 Udall, S.L. Remarks before the National Audubon Society Convention, Atlantic City, N.J., Sept. 30, 1967. U.S. DEPT. OF THE INTERIOR NEWS RELEASE, 7p. Oct. 1, 1967.

The conservation gains of recent Congresses are praised as many areas with unique qualities have been set aside to preserve some part of America's natural and cultural heritage. Since Americans have too often chosen short-term profit over long-term environmental health, an "ecological conscience" needs to be developed. Stressing the primary importance of environmental education, one among several recommendations was to establish a National Environmental Education Center to communicate directly, and through our school systems, with young America.

71395 Underhill, A.H. Bureau of Outdoor Recreation and Hunting and Fishing. Remarks at the Fontana Conservation Roundup, Fontana Dam, North Carolina, May 19, 1967. Washington, Bureau of Outdoor Recreation. 4p. 1967.

The role of hunting and fishing in outdoor recreation programs is explained. Conservation planning and action begin at the State and local levels. Hunters and fishermen must join with wilderness lovers, foresters, municipal park planners, and local legislators to plan wisely and to act before it is too late. To the maximum extent possible the various outdoor interests must be coordinated to pool resources. The Bureau of Outdoor Recreation, as a planning and coordinating agency, emphasizes the formulation of good plans and the pursuit of sound action programs. Outdoor recreation can and should become the rallying point for the development of some nonconsumptive uses of fish and wildlife, for wise land use, for sound conservation practices, and other long-range objectives in order to realize an environment that really enhances the joys of living.

71396 U.S. Bureau of Outdoor Recreation. FINANCING OF PRIVATE OUTDOOR RECREATION. Washington, D.C. 18p. 1967. Illus.

In order to evaluate the demand and availability of private credit for outdoor recreation enterprises, the Bureau of Outdoor Recreation conducted a survey of banks, insurance companies, and savings and loan associations. The survey revealed that improvement was needed in the availability of credit. Moreover, it showed that most financial institutions favored a Federal participating loan program over a Federal loan insurance program. Other findings are presented and summarized in this report.

71397 U.S. Bureau of Sport Fisheries and Wildlife. Sport Fishing Institute. 15 YEARS OF BETTER FISHING. Washington, Govt. Print. Off. 32p. 1967. Maps, photos., tables.

The quality of sport fishing in the last 15 years has greatly improved through the accomplishments of the Federal Aid in Fish Restoration Act of 1950, better known as the Dingell-Johnson. This program of State-Federal cooperation has increased the value of fishery resources through better fishery management, an augmented knowledge of fishery science, and the availability of Federal funds. The future of fish management and the role of the Dingell-Johnson program and the prospects of higher demands on natural resources attendant with an increase in population and urban development are considered. SH34 A23 No. 42

71398 U.S. Congress. House. Committee on Agriculture. FEDERAL COST SHARING FOR RURAL CONSERVATION AND DEVELOPMENT PROJECTS. Hearings. Washington, Govt. Print. Off. 79p. 1967. (90th Congress, 1st sess. Serial EE).

The Subcommittee on Conservation and Credit of the Committee on Agriculture met to consider H.R. 6233, and several similar bills to amend section 32 (e) of title III of the Bankhead-Jones Farm Tenant Act, which provides Federal cost sharing in public fish, wildlife, or recreational development. Coordinated Federal assistance to local communities for resource and conservation development programs would stimulate economic growth and job opportunities. In most project areas a great potential for economic growth lies in the development of land and water resources for outdoor recreation. Other bills for consideration which are similar to H.R. 6233 are: H.R. 6127, H.R. 6169, H.R. 6178, H.R. 6293, H.R. 6045, H.R. 6684, H.R. 7055, H.R. 7110, H.R. 8383, H.R. 10298, H.R. 11260, S. 852.
K37 A2 90EE

71399 U.S. Congress. House. Committee on Agriculture. MANAGEMENT POLICY AND OTHER PROBLEMS OF THE NATIONAL FORESTS. Hearings. Washington, Govt. Print. Off. 164p. 1967. (90th Congress, 1st sess.)

Hearings were held on 18 bills related to management policies and other problems of the national forests. The proposed legislation attempts to solve problems concerning use permits for national forests, sale of land in Wyoming, payment in lieu of taxes on national forest lands, a preliminary survey by the Secretaries of Agriculture and Commerce of a proposed Skyline Drive Recreation Way through two national forests in Utah, and surveys of timber and other

U.S. forest resources.
K37 A2 90 J.Pt. 2.

71400 U.S. Congress. House. Committee on Agriculture. WATERSHED PROJECTS. Hearings. Washington, Govt. Print. Off. 182p. 1967. Tables. (90th Congress, 1st sess. Serial FF).

Consideration is given to watershed projects that are recommended by the Dept. of Agriculture, to control floodwater damage to crops, agricultural properties, roads, bridges and railroads. Land treatment and structural measures utilized in watershed protection and flood prevention are discussed. Data is included on land use and cost-benefit ratio. Recreation is listed as an incidental benefit secondary to flood prevention. K37 A2 90FF

71401 U.S. Congress. House. Committee on Government Operations. WATER POLLUTION – CENTRAL AND NORTHERN CALIFORNIA. Hearing. Washington, Govt. Print. Off. 341p. 1967. Ref., maps, tables. (90th Congress, 1st session).

At a hearing conducted by the Natural Resources and Power Subcommittee, House Committee on Government Operations, in Sacramento, Calif. on water pollution – Central and Northern Calif., representatives of several Calif. State agencies, Federal officials assigned to regional offices within that State, Congressmen, and members of trade associations testified on water pollution as it affects California – particularly Lake Tahoe, San Francisco Bay, and San Joaquin master drain. Major problems of cost, policy, planning and action in these areas in the past, at present, and for the future were reviewed. The appendixes contain the Federal Water Pollution Control Administration documents concerning establishment of State standards for interstate waters. These include policy guidelines, and guidelines established by the Water Quality Control Act of 1965. Communications from Associated Sportsmen of California and the California Wildlife Federation and Salmon Unlimited also are recorded. K37 G7 90:1 M

71402 U.S. Congress. House. Committee on Interior and Insular Affairs. PUBLIC LAND LAW REVIEW COMMISSION. Hearings. 63p. 1967. (90th Congress, 1st sess. Serial no. 90-16).

The first section of this document contains a briefing on the objectives of the Public Land Law Review Commission, its study plans and procedures, and budgetary and time limitation considerations. Lands within the scope of the PLLRC by State, acreage, and administrative civil and defense agencies are listed in tabular form. The term 'public lands' as used in the Act (P.L.88-606), which established the Public Land Law Review Commission includes: (a) the public domain; (b) reservations, other than Indian reservations, created from the public domain; (c) lands permanently or temporarily withdrawn, reserved or withheld from private appropriation and disposal under public land laws, including mining laws; (d) outstanding interests of the United States in lands patented, conveyed in fee or otherwise, under the public land laws; (e) national forests; (f) wildlife refuges and ranges; and (g) surface and sub-surface resources of all such lands, including the deposition of restriction on disposition of the mineral resources in lands defined by appropriate statute, treaty, or judicial determination as being under the control of the U.S. in the outer Continental Shelf. The second section contains testimony of a hearing on a bill to amend P.L.80-606 to extend the existence of the PLLRC and the deadline for its report for an additional 18 months. Under the amended PLLRC Act the report with recommendations should be submitted to the Congress and the President by June 30, 1970 and the Commission would cease to exist on December 31, 1970, or six months after the submission of the report. K37 I5 90 no. 16

71403 U.S. Congress. House. Committee on Merchant Marine and Fisheries. ESTUARINE AREAS. Washington, Govt. Print. Off. 48p. 1967. Tables. (90th Congress, 1st sess. House Report No. 989).

Estuarine areas are valuable for sport and commercial fishing, recreation, wildlife conservation, and scenic beauty. This report, which accompanies H.R.25, recommends that the Secretary of the Interior in cooperation with the States should preserve, protect, develop, restore, and make accessible the estuarine areas of America. The purpose of the bill H.R. 25, its legislative background, the need for such legislation, a section-by-section analysis, and cost of implementation of the legislation are reported.

71404 U.S. Congress. House. Committee on Public Works. ENTRANCE ADMISSION AND USER FEES AT CORPS OF ENGINEERS PROJECTS – 1967. Hearings. Washington, Govt. Print. Off. 182p. 1967. Photo., tables. (90th Congress, 1st sess. Serial No. 90-16).

Testimony is given on H.R. 11-236 and related bills to amend the River and Harbor Act of 1965 to exclude all fees for Corps of Engineers lakes and reservoirs. Revenues from the Corps of Engineers' reservoirs and lakes are deposited in the Land and Water Conservation Fund for the acquisition of new recreation areas and development of facilities. Most of the testimony from conservation groups was opposed to the legislation since it would have a deleterious effect on the Fund. These organizations did oppose charging of fees for ski jump ramps, diving platforms, boathouses and docks. The proponents of the bill argued that:(1) these fees impose an unjust double tax on the users of the facilities; (2) collection costs more than the amount of revenue yielded; (3) entrance fees serve to deny access to waters which are guaranteed free to the public by both law and tradition; (4) entrance fees are not used for the maintenance and improvement of the lakes where collected; (5) entrance fees prove impossible to collect efficiently and fairly; (6) entrance fees deny recreation opportunity to the citizens of low income; (7) entrance fees often are inconsistent with the practice of the States in which they are collected.
K37 P9 90:1 K

71405 U.S. Congress. House. Committee on Public Works. REVIEW OF HIGHWAY BEAUTIFICATION – 1967. Hearings. Washington, Govt. Print. Off. 1097p. Photos., tables. (90th Congress, 1st sess.).

H.R. 7797 would provide authorizations from the Highway Safety and Beauty Trust Fund to carry out the purposes of the highway safety and beautification programs under title 23, U.S. Code. Hearings on H.R. 7797 consisted of a comprehensive review of the Highway Beautification Act of 1965, its proposed implementation, and its financing preparatory to necessary legislation. K37 P9 90:1 F

71406 U.S. Congress. House. Committee on the District of Columbia. AIR POLLUTION. Hearings. Washington, Govt. Print. Off. 103p. 1967. Ref., tables. (90th Congress, 1st sess.).

Testimony on three bills to provide for the prevention, abatement, and control of air pollution in the District of Columbia is presented with statistical evidence. Damage from air pollution to health is discussed, and statements from the Department of Health, Education and Welfare, the District of Columbia Government, and letters from interested citizens' groups are recorded.
K37 D6 90:1m

71407 U.S. Congress. House. Illinois Delegation. POLLUTION OF LAKE MICHIGAN. Washington, Govt. Print. Off. 111p. 1967. Illus. (90th Congress, 1st sess.).

Lake Michigan has been polluted rapidly over the past years. In October 1967 the Illinois Delegation to Congress held a conference with representatives of the Army Corps of Engineers, the Dept. of the Interior, State of Illinois and Metropolitan Sanitary District of Greater Chicago, to determine the main sources of pollution of the Lake. The main focus of the meeting was the Corps of Engineers' dumping of dredgings from Indiana Harbor into Lake Michigan. The Indiana harbor area contains many oil storage tanks which could contriute a major source of oil pollution to the water. The Committee reviewed estimated dredging requirements on all 5 of the Great Lakes for calendar year 1967. K37 G7 90:1 W

71408 U.S. Congress. Senate. Committee on Agriculture and Forestry. COMMUNITY CENTERS AND FHA LOANS AND GRANTS. Hearings. Washington, Govt. Print. Off. 270p. 1967. Maps, illus., tables. (90th Congress, 1st sess.)

Hearings were held on three Senate bills concerned with Farmers Home Administration loans for community centers. These Senate bills – S. 1479, S. 1504, and S. 1642 – would authorize loans and grants for community centers, remove the annual ceiling on insured loans, and would authorize the Secretary of Agriculture to finance and participate with State and local interests in the financing of recreational enterprises and industrial establishments. Testimony, debate, and exhibits, pro and con, are included. K38 A2 90:1F

71409 U.S. Congress. Senate. Committee on Commerce. ECOLOGICAL IMBALANCE IN THE GREAT LAKES. Hearings. Washington, Govt. Print. Off. 186p. 1967. Illus., photo., tables. (90th Congress, 1st sess. Serial No. 90-39).

Statements and evidence are presented in support of S. 2123, a bill to provide for the control of the alewife and other fish and aquatic animals in the waters of the Great Lakes which affect adversely the ecological balance of the Great Lakes. Dr. Stanley Cain, Asst. Secretary for Fish and Wildlife and Parks, U.S. Dept. of the Interior, pointed out that the population explosion of alewives in the upper Great Lakes had upset the ecological balance and was creating serious and costly nuisance problems and having a deleterious effect on

tourism in the region. For a lasting solution to the alewife problem, scientific research on the ecological characteristics of the multiple-species complex and the subsequent domination by the alewives is needed. Action taken by the Michigan State Dept. of Conservation in collaboration with the Bureau of Sport Fisheries and Wildlife is described. The Secretary of the Interior has created a Federal task force to propose corrective measures. The Task Force's plan of action is outlined.
K38 C7 90 no. 39.

71410 U.S. Congress. Senate. Committee on Interior and Insular Affairs. APOSTLE ISLANDS NATIONAL LAKESHORE. Hearings. Washington, Govt. Print. Off. 327p. 1967. Maps, illus., tables. (90th Congress, 1st sess.)

Senate bill S.778 provides for the establishment of the Apostle Islands National Lakeshore in the State of Wisconsin. The hearings contain statements by representatives of Wisconsin, conservationists from the private sector, and the Advisory Board on National Parks, Historic Sites, Buildings, and Monuments. The proposed national lakeshore would be made up of three units: the Islands, the Red Cliff unit, and the Bad River Sloughs. Twenty-one of the 22 Apostle Islands would be included. These islands range from three acres in size to over 10,000 acres and vary in height from 50 feet to 500 feet. The report submitted by the Secretary of the Interior describes the resources of this area and its recreation potential.
K38 I5 90:1T

71411 U.S. Congress. Senate. Committee on Interior and Insular Affairs. NATIONAL PARK FOUNDATION. Hearing. Washington, Govt. Print. Off. 21p. 1967. (90th Congress, 1st. sess.)

Senate bill S.814 proposed to establish the National Park Foundation, which would make possible the giving of private gifts of real estate, personal property, or income therefrom to the National Park Service to further the conservation of natural, scenic, historic, scientific, educational, inspirational or recreation resources for future generations of Americans. A charitable and nonprofit corporation, the National Park Foundation would accept and administer such gifts. Statements and testimony on this proposed legislation are reported.
K38 I5 90:1 W

71412 U.S. Congress. Senate. Committee on Public Works. HIGHWAY BEAUTIFICATION AND HIGHWAY SAFETY PROGRAMS. Hearings. Washington, Govt. Print. Off. 462p. 1967. Maps, illus., photos., tables. (90th Congress, 1st sess.)

Senate bill S. 1467 would provide authorization from the Highway Safety and Beauty Trust Fund to carry out the purposes of the highway safety and beautification programs under title 23, U.S. Code. These hearings delved into matters relating to the Highway Beautification Act and the Highway Safety Act, which were enacted by the 89th Congress. The hearings examined the implementation of the beautification program to see that the rights of all affected by it were adequately protected and that an effective plan for the continued protection and enhancement of the scenic values of our Nation's highway systems was being developed.
K38 P9 90:1L

71413 U.S. Congress. Senate. Committee on Public Works. OZARKS – FOUR CORNERS REGIONAL DEVELOPMENT COMMISSIONS. Hearings. Washington, Govt. Print. Off. 648p. 1967. Maps, photos., tables. (90th Congress, 1st sess.)

The hearings were held to determine the economic needs of the Ozarks region and to close the income gap between this region and the nation. Programs are proposed to encourage industrial expansion and development and thus create new jobs through: (1) education and training of unskilled residents; (2) Federal, State and local programs; and (3) regionwide programs. Studies and comparison charts of personal income, taxable incomes for 1960-66, population distribution, and Federal programs for Arkansas, Missouri, Oklahoma and New Mexico are given.
K38 P9 90:1U

71414 U.S. Congress. Senate. Committee on the Judiciary. FEDERAL FIREARMS ACT. Hearings. Washington, Govt. Print. Off. 1186p. 1967. Photos., tables. (90th Congress, 1st sess.).

The purpose of these hearings before the Subcommittee to Investigate Juvenile Delinquency is to amend the Federal Firearms Act. Testimony by witnesses representing the government as well as private interests is given for the control and reduction of the unrestricted acquisition and use of firearms to minors, the criminal, and the emotionally disturbed. The need and importance of State and local legislation to enforce restrictions on mail order sale of firearms and non-resident purchase are emphasized. Fees, taxes, and municipal ordinances for the control of gun sales are also discussed. Data on firearm crimes, mail order sales of guns, direct purchases of firearms, and other evidence to support the statements are furnished. K38 J9 90:1 S

71415 U.S. Dept. of Agriculture. COMMUNITIES OF TOMORROW. AGRICULTURE/ 2000. Washington, Govt. Print. Off. 31p. 1967. Photos.

This document sketches in broad terms the solution to the imbalance of people and opportunity – a new type of community, neither urban nor rural, but containing the highest values of both, a functional, multicounty Community of Tomorrow that blends the economic and cultural opportunities of affluent metropolitan life with the space and beauty of the countryside. To provide outdoor recreation and preserve natural beauty in these new communities the U.S. Dept. of Agriculture makes 8 policy recommendations.

71416 U.S. Dept. of Agriculture. OUTDOORS U.S.A. Washington, Govt. Print. Off. 408p. 1967. Ref., map, illus., photos. (Yearbook of Agriculture 1967).

This is designed for all persons concerned about natural resources conservation – hunters and fishermen, family campers, youngsters eager to learn about the outdoors, farmers and rural developers interested in profit-making recreation enterprises, and others. Case history stories discuss outdoor resources and demonstrate the ways in which they can be and are being used to provide outdoor recreation and income. S21 A35 1967

71417 U.S. Dept. of Agriculture. RESOURCES IN ACTION. AGRICULTURE/ 2000p. Washington, Govt. Print. Off.

21p. 1967. Photos.

"This document seeks to set down in sharp outline new conservation policies and the path to their implementation." The Dept. of Agriculture and its diverse agencies are dedicated to the tradition of helping men to help themselves and to provide leadership to restore, conserve and make wise use of our natural heritage.

71418 U.S. Dept. of Agriculture. Magruder Corridor Review Committee. REPORT. Washington, Govt. Print. Off. 58p. 1967. Map, illus.

The Magruder Corridor, within the Bitterroot National Forest, is discussed for its watershed-fisheries values, potential recreation values, and its historic significance as a natural connecting route between Idaho and Montana. Some of the recommendations made by the Review Committee for the management of the Corridor are: (l) the promotion of water quality and flow conditions for the maintenance of the anadromous salmon and steelhead populations; (2) stipulations on the deferment of timber cutting and concommitant logging road construction; (3) criteria for road construction and maintenance in the area; (4) greater consideration for recreation use and values; (5) research related to erosion and sedimentation; (6) unrestricted national forest classification. A description and history of the Corridor as well as a map of the area are included.

71419 U.S. Dept. of Commerce. THE AUTOMOBILE AND AIR POLLUTION: A PROGRAM FOR PROGRESS. 2v. Washington, Govt. Print. Off. 1967. Ref., maps, illus., photos, tables.

In Part I the Panel on Electrically Powered Vehicles discusses the relation of automotive emissions to air pollution, the technology and control of air pollution, and the public health and welfare. The Panel outlines the significance of the role of industry and the government in pollution control, and makes 16 recommendations to the Federal Government for a national program in the control of air pollution. In the second part, six subpanels report in depth on problems of automotive air pollution. Statistics show the contribution the automobile makes to national air pollution. Guidelines for public policy and air quality standards are suggested.

71420 U.S. Dept. of Commerce. Business and Defense Services Administration. LIGHTING FOR OUTDOOR RECREATION. Washington, Govt. Print. Off. 26p. 1967. Ref., illus., photos., tables.

In delineating present and future recreation needs, this booklet shows how the effective use of existing outdoor recreation facilities can be greatly increased through the intelligent use of night lighting. It contains socio-economic benefits, technical data and examples of successful outdoor lighting programs in several different regions. An appendix lists Federal programs that provide financial and technical assistance for both public and privately owned recreation facilities.

71421 U.S. Economic Development Administration. OPPORTUNITIES IN TOURISM AND RECREATION IN SOUTHEASTERN MASSACHUSETTS. N.Y., Wolf Management Services. 219p. 1967. Ref., maps.

The purpose of this study is to aid the expansion of economic opportunities from the recreation and tourist resources of Southeastern Massachusetts. This region has much intrinsic tourist and recreation value and is of great historic interest, but these have not been developed to the fullest extent. State, Federal, and local planners have designated numerous areas for public recreation development. The study details problems and opportunities of the region and presents inventories of outdoor recreation facilities and businesses, growth rates in tourist-oriented sectors, competitive patterns, undeveloped recreation and tourist resources, demand for recreation space, and the expansion of industry to promote growth. Included in one of the appendices are plans for proposed recreation development areas. Among these are 3 plans for the proposed Plymouth National Monument by the National Park Service.

71422 U.S. Federal Water Pollution Control Administration. Northwest Regional Office. POLLUTIONAL EFFECTS OF PULP AND PAPER MILL WASTES IN PUGET SOUND. Portland, Oreg. 500p. 1967. Ref., maps, illus., photos., tables.

The Washington State Enforcement Project, a cooperative effort of the Washington State Pollution Control Commission and the Federal Water Pollution Control Administration, conducted investigations on pollution created by wastes discharged by seven pulp and paper mills in Puget Sound. The objectives of the Project were to determine the effects of these wastes on water quality and marine life, to determine their effect on legitimate water uses, and to identify pollution abatement needs. The investigations were conducted in four areas of the Sound, the waters of which constitute one of the most valuable resources of the State of Washington and the Pacific Northwest. Sports fishing and water recreation are among the principal water uses in Puget Sound. Major findings and recommendations are listed separately for each area.

71423 U.S. Federal Water Pollution Control Administration. PROGRAM. REVISED AND UPDATED. Washington. v.p. 1967. Ref., maps.

The book contains a review for the problem of water pollution, the Federal program to solve the problem, and the existing capability for accomplishing a solution. The types of grants offered for clean water are outlined. In addition, the names and addresses of all State and interstate water pollution control administrators are listed.

71424 U.S. National Park Service. A review of the Everglades problem. IUCN BULL. 2(5):35, 40, Oct.-Dec. 1967. Photo.

The proliferation of flood control and drainage construction programs in South Florida has resulted in a serious water deficit in the Everglades National Park. Studies are underway to alleviate the shortage and protect this biological wilderness.

71425 U.S. Office of the Vice President. THE VICE PRESIDENT'S HANDBOOK FOR LOCAL OFFICIALS. A GUIDE TO FEDERAL ASSISTANCE FOR LOCAL GOVERNMENTS. Washington, Office of the Vice President. 297p. 1967. Illus., photos., tables.

Part V of the handbook entitled "Natural Resources and Environmental Improvement," discusses the efforts – Federal, State and local – to preserve the Nation's natural resources and to enhance the opportunity for all Americans to enjoy a harmonious, productive, and attractive environment. Chapter 14 on "Land Resources" outlines programs that help preserve, create or develop parks, open space, and outdoor recreation resources. Chapter 15, "Water and Air Resources," summarizes the programs for development of water resources and for the prevention and control of air and water pollution. The Federal aid discussed in both chapters is designed to help localities improve their environment by identifying and developing programs to conserve and use wisely their natural resources. Special attention is given to Federal aid for States and their political subdivisions to provide outdoor recreation. HC 106.5 A574

71426 U.S. President (Lyndon B. Johnson). Protecting our natural heritage. WEEK. COMPIL. PRES. DOC. 3(5):131-142, Feb. 6, 1967.

The President's Message to Congress proposes air pollution controls and measures on safety, beautification, and natural resources. Passage of the Air Quality Act of 1967 is recommended. Measures on the controlled development of the geothermal stream, resources of the seas, non-fuel minerals and energy are outlined. The establishment of new national parks, wilderness areas, national scenic rivers, Nationwide System of Trails and acquisition of new recreation areas are recommended. The creation of a special Highway Safety and Beauty Trust Fund is recommended, as well as supportive measures by Regional Air Quality Commissioners.

71427 Up...up...up...up! SPORT. GOODS DEAL. 136(1):92, Apr. 1967.

In an annual survey by the Sporting Goods Dealer, leading manufacturers confirm that golf sales are increasing and show even greater promise for the 1967 season.

71428 Utility wire lines going underground in West. WEST. CITY, 43(11): 17, Nov. 1967. Photo.

Six city reports show variety of approaches utilized to remove unsightly wiring in residential and commercial districts.

71429 Vollmer Ostrower Associates. OUTDOOR RECREATION FOR THE PHYSICALLY HANDICAPPED. A HANDBOOK OF DESIGN STANDARDS. Albany, N.Y. Dept. of Conservation. 15p. 1967. Ref., illus.

The design standards described in this report have been approved and adopted by the New York State Council of Parks and Outdoor Recreation. The adaptation of all existing parks in accord with these standards is required and they are mandatory for all future construction of public outdoor areas. Every municipality that wishes to qualify for State or Federal aid in its recreation developments must adhere to these design standards. They will make its public outdoor recreation facilities more readily usable by its physically handicapped citizens. The recommendations in this handbook will help increase the recreation potential of any public park for use by the physically handicapped person and make his visit there a safe, less strenuous, and a more pleasurable experience.

71430 Von Eckardt, W. A PLACE TO LIVE. THE CRISIS OF THE CITIES. N.Y., Seymour Lawrence. 430p. 1967. Ref., illus., photos.

The author, a renowned journalist and architectural critic, stresses here the importance of good design to make the urban community meaningful to its inhabitants – to give each a sense of belonging, a sense of place in a bewildering universe. Architecture and urban planning should be one discipline, since urban design is really architecture in a large scale. Architecture has failed to respond to the needs of this age and has failed to give a sense of place to the environment. Although the first part of the book deplores the results of architecture which have helped to destroy rather than create a sense of place in the cities and suburbs, the book ends on a level of optimism as it considers current architectural approaches in urban renewal efforts. Specific examples are cited and numerous illustrations appear. The contributions of architects who attempted to fuse art and technology to create a truly livable environment are discussed.
NA680 V6

71431 Walker-Catoosa-Dade Development Association. NORTHWEST GEORGIA. WALKER–CATOOSA–DADE COUNTIES. Knoxville, Tenn., Tennessee Valley Authority. v.p. 1967. Ref., maps, illus., photos., tables.

"This is an abbreviated edition of a comprehensive Summary of Resources report. The recreation work group collected data on facilities and related services for inclusion. T.V.A. supplemented and analyzed these data and the findings were reviewed by officials of the Coosa Valley Area Planning and Development Commission, the National Park Service and the WACADA Development Association. Their suggestions and comments are incorporated in this report."

71432 Wallace, J.C. Our changing environment – some reflections on the dark side of "progress". WILDL. N.C. 31(6):6-12, June 1967. Photos.

Abuse of natural resources as well as air and water pollutants are deleterious to the environmental quality and are hazardous to human health. Increased citizen information, stronger legislation, and industrial cooperation are recommended.

71433 Wallace, H.J. THE WABASH VALLEY...A SLEEPING PARADISE. Crossville, Ill., Gregg Offset Printing. 120p. 1967. Maps, photos.

This book, privately printed by the author, extols the virtues of the Wabash Valley, an area covering 88 counties in Indiana and Illinois. The economy of this region is discussed and proposals for development offered. The role of a citizen's conservation organization, the Wabash Valley Association, in promoting the region is presented.

71434 Warren, M.E. What should we keep? MD. CONSERV. 44(5):22-25, Oct. 1967. Photos.

Recently the Maryland State Planning Dept. released an inventory of Maryland's natural areas. Other surveys completed by the Dept. of Economic

Development and the Maryland Historic Trust show the State's assets of early American architecture as well as historic sites which reflect the Nation's heritage. In the latest session of the Maryland legislature, an organization called the Maryland Environmental Trust was established. Its purpose is to conserve and improve the aesthetic, natural, scenic, and cultural qualities of the Maryland environment, which can include land, water, air, wildlife, scenic qualities, open space, and buildings. Citizens are urged to recommend areas worthy of preservation to the State agencies.

71435 Water Symposium, State University of New York at Buffalo, 1966. THE FRESH WATER OF NEW YORK STATE: ITS CONSERVATION AND USE. Dubuque, Iowa, Wm. C. Brown. 255p. 1967. Ref., maps, photos., tables.

The contributions of the more than 65 speakers who participated in the Symposium concerned with water resources in New York State may be helpful to the solution of current water resource problems nationally and abroad. This State adjacent to the Great Lakes, the largest contiguous collection of bodies of fresh water in the Americas, together with the headwaters of major rivers, and numerous lakes, such as the Finger Lakes, has been endowed with water resources unequalled in most of the world. The five-day conference was divided into 9 sessions: (l) our water resources – a panoramic view; (2) water pollution: problems and opportunities; (3) water energy and conservation; (4) the Grand Canal concept; (5) the Great Lakes – a joint resource; (6) water resources planning; (7) management of water resources; (8) life underwater; (9) regional problem situations. A summary of the Symposium was presented in an address by Jean Gottmann, whose papers, along with several others from the conference, are abstracted individually. TD224 N7W3 1966

71436 Waterman, C.F. Everglades dry-out. SALT WAT. SPORTS. 28(9): 32-33, 74-75, Sept. 1967. Photos.

As the Everglades National Park is gradually drying up as a result of man-made changes in its watershed, serious damages to the ecology and recreation potential of this area have appeared. Suggestions for reducing damaging effects of this situation are proposed.

71437 Weaver, R.C. Recreation needs in urban areas. NAT. PARKS MAG. 41(243):10-13, Dec. 1967. Photos.

Secretary of the Dept. of Housing and Urban Development, Robert C. Weaver, points up the need to provide opportunities for city dwellers to find recreation, rest, and relaxation within the city. In the past, the traditional concept of recreational outlets has been oriented to the rural setting. The quality of city life can be improved by portable parks, vest pocket parks, and urban project malls and parks similar to those developed in Chicago, Washington, D.C., New York, Kansas, and California. The Open Space and Urban Beautification programs are described.

71438 Wedel, W.R. Salvage archeology in the Missouri River Basin. SCIENCE, 156(3775):589-597, May 5, 1967. Ref., map, photos.

Much valuable archeological information about the predecessors of the historic Indian tribes who inhabited the Central Plains would be lost as reservoirs were constructed by the Corps of Engineers and the Bureau of Reclamation. In order to rescue 10,000 years of human prehistory from the rising reservoirs (over 100 in the Missouri River Basin) some far-sighted archeologists planned a salvage operation. Their organization, collaboration with several Federal agencies, and achievements are described.

71439 Wendt, P.F. Forecasting land uses. URB. LAND, 26(7):9-14, July-Aug. 1967. Illus., photos.

Problems involved in projecting growth of cities are discussed. Population increase, technological development, trends in family income, and the role of government are all factors which must be considered in forecasting. An analytical technique used for forecasting future land uses is the computer simulation model. The San Francisco Bay Area model is described as an example.

71440 West, W.E., Williams, R.S. A SUMMARY REPORT. VOYAGEURS NATIONAL PARK PROPOSAL. St. Paul, Minn. Dept. of Conservation. 101p. 1967. Maps, illus., photos., tables.

The first part of the report contains a short description of the National Park Service with statements of selection criteria for various types of areas. The contrasting philosophies of the Forest Service and National Park Service on the management of lands under their respective jurisdictions are stated. The most pertinent facts about the Voyageurs National Park proposal are assembled and presented with full and impartial discussion. Good maps, charts and other illustrations are included. The economic impact and the beneficial aspects of the proposed park are considered. Problems of land acquisition, fish and wildlife management, leases on state-owned land, and the geology and mineral potential in the establishment and management of the area as a national park are discussed. Alternate sites and management proposals are also presented.

71441 White, J. A report on Florida's boating law after two years' operation. In: Southeastern Association of Game and Fish Commissioners. PROCEEDINGS, 18th Annual Conference, 1964. Columbia, S.C., p.581-584, 1967.

Originally set up as an advisory group on boating safety, the Florida Boating Council now functions as a State agency. Its membership composition, goals and duties are explained in this report. The different classes of vessels with the safety equipment required by law are listed and described. These Florida laws and regulations about boats have been established with the dual aims of increasing safety afloat and of enhancing the pleasure of all who use Florida waters for recreation.
SK351 S7 1964

71442 White, J.B.C. Some plants are poison! PA. GAME NEWS, 38(5):11-16, May 1967. Ref., photos., illus.

This article lists some of the most common poisonous plants in Pennsylvania, symptoms of poisoning, and basic instruction on treatment.

71443 White, W.C. ADIRONDACK COUNTRY. N.Y., Knopf. 338p. 1967. Maps, illus.

This book traces history of the Adirondack Mountains from the visit of the first white man, Jacques Cartier in 1536, to the early twentieth century. Geological history is also reported. Themes with which the book is concerned

are: (1) the ever-widening use of the region for recreation, and (2) problems in the preservation of the area as "forever wild", a status conferred by action of the New York State Legislature in 1892 and debated in the 1967 New York State Constitutional Convention. By preservation in a state of "forever wild," present and future generations would view this great scenic region as it was in the past.
F127 A2W5 1967

71444 Wildlife abounds in stabilized marshes. RECLAMA. ERA, 53(2):42-43, May 1967. Photo.

Stabilizing and improving the quality of water of Colorado's Topock and California's Suisun marshes preserved and enhanced the fish and wildlife of the area.

71445 Wilkinson, S. Learning to fly. HOLIDAY, 41(6):101-106, June 1967. Illus.

The author, a private pilot, gives basic information on costs and requirements for a flying license. With some 400,000 licensed private pilots in the United States and an estimate that this number will be doubled by 1969, the light plane industry is providing comfortable, fast, safe and comparatively inexpensive equipment. Various models of light airplanes are described, and prices of both new and second-hand planes are given.

71446 Willis, F. More lakes being built in State. HAP. HUNT. GROUND, 23(3):2-3, May 1967. Map, photos.

Six multiple-purpose reservoirs, five of them scheduled for completion by 1970, will increase Kentucky's major lake fishing and recreational waters by more than 26,000 acres during the next six years. The lakes are being constructed by the U.S. Corps of Engineers and will impound water primarily for flood control and recreational purposes. Various projects are described.

71447 Windes, V. Probing for new clues in old ruins. N. MEX. MAG. 45(9):3-5, Sept. 1967. Photos.

The National Park Service has been excavating the Pecos National Monument since the summer of 1966. The Park Service intends to build an information center with parking lot and picnic area, but projects a minimum development program to stabilize the ruins so that they will not deteriorate any more.

71448 Wirth, C.L., Thompson, B.H., Thompson, R. A REPORT ON A PROPOSED ADIRONDACK MOUNTAINS NATIONAL PARK. New York, American Conservation Association, Inc. 16p. 1967. Ref., maps, illus., photos., tables.

A feasibility study for a proposed National Park within the Adirondack State Park was made at the request of Laurance Rockefeller, who presented it to Governor Nelson Rockefeller and Secretary of the Interior Stewart Udall on July 30, 1967. The report outlines the natural features that qualify the area for National Park status and points to some of the more important economic considerations. The proposed Adirondack Mountains National Park extends over 1,720,000 acres of land and water, of which more than half (1,120,000 acres) are owned by the State of New York and includes Lake Placid and Saranac Lake as well as large areas of scenic wilderness. The inclusion of another national park near America's largest population centers would strengthen the National Park System and preserve a unique segment of our Country for human enjoyment. In addition to reasons why there should be a national park in the Adirondacks, this report contains certain suggestions which should be considered in any legislation that might be prepared.

71449 Wisconsin. Division of Highways. Bureau of Right-of-Way. A MARKET STUDY OF PROPERTIES COVERED BY SCENIC EASEMENTS ALONG THE GREAT RIVER ROAD IN VERNON AND PIERCE COUNTIES. Madison, Dept. of Transportation. 30p. 1967. Maps, illus., photos. (Special Report No. 5).

Planning for the Great River Road, originally known as the Mississippi Parkway, began as early as 1939 – first by the Mississippi River Parkway Planning Commission, later joined in by cooperating agencies in eight States. By July 1967 scenic easements in the State of Wisconsin had covered 6,223 acres and involved 601 parcels of land along most of the Great River Road. The purpose of this study was to provide information about the acquisition of scenic easements. Previous studies by the Land Economic Studies Unit have been concerned with the economic effects of highway construction and improvement, but the present survey constituted an approach into a relatively unexplored area of highway research on scenic easements.

71450 Woelke, C.E. Measurement of water quality with the Pacific oyster embryo bioassay. In: National Meeting on Water Quality Criteria, 1st, Philadelphia, 1966. WATER QUALITY CRITERIA. Philadelphia, American Society for Testing and Materials, p.112-120, 1967. Ref., map, tables. (ASTM Special Technical Publication No. 416).

"Meaningful water quality standards or criteria must be expressed in terms of consumer needs. If these needs are based on chemical parameters", or biological factors, the criteria or standards should be based on chemical measurements or biological measurements. This method and these bioassay techniques are recommended for adoption as part of the measurements employed in defining water quality standards and criteria. TD370 N3 1966

71451 Wolfe, R.I. A USE-CLASSIFICATION OF PARKS BY ANALYSIS OF EXTREMES: FINAL REPORT OF THE RECREATIONAL TRAVEL STUDY. Toronto, Ont. Dept. of Highways. 134p. 1967. Ref., maps, illus., tables. (Ontario, Dept. of Highways. Report no. RR134).

This report presents the 1966 Park User Survey results, a survey made by the Dept. of Highways, Ontario, in cooperation with the Dept. of Lands and Forests. Both day-visitors and campers were surveyed, but campers are the main subjects of this report. Patterns of movement from park to park were also studied. The survey staff devised a technique called an "analysis of extremes" to specify the attributes that were most distinctive of a park or of a region. This technique, if given statistical rigor, may prove useful in establishing use classification of Provincial Parks. The resulting use-classification of parks will allow planners of parks and highways to relate the physical characteristics of parks to the attributes and activities of the campers who will use them. It should eventually be possible to decide where and when new parks and highways should be provided, and of what character. For any new park that is planned for the future, it will be possible to predict who will camp there, where from, and where they will go when they leave – in what numbers and using which highways. Additional predictions can be made about the age, education and occupation mixes of the campers, their activity preferences, and what will be the total general character of the park.

71452 Wolnez, G.J. Accident-proof your recreation program. RECREAT. MANAGE. 10(4):26, 28-29, May 1967. Photos.

A seven-point program for accident prevention in industrial recreation is presented by a safety expert.

71453 Woodford, J. Polar Bear National Park. ONT. NATUR. 5(3):3-5, Sept. 1967.

The Federation of Ontario Naturalists believes that important parts of the natural heritage should be safeguarded. Polar Bear National Park, a proposed wilderness park in Northern Ontario, is described as such an area of significance. Its distinctive geographic features and the reasons for its suitability as a national park are set forth.

71454 Wright, L. Put flood-plain management first...to avoid the disaster of a river on the rampage. AMER. CITY, 82(11):98-99, Nov. 1967.

Although the Federal Government has spent more than 7 billion dollars on flood control, the amount of property damage is still rising. The article illustrates several different ways of planning the flood plain area for minimum damage.

71455 Wurtz, C.B. Water use for aquatic life. In: National Meeting on Water Quality Criteria, 1st, Philadelphia, 1966. WATER QUALITY CRITERIA. Philadelphia, American Society for Testing and Materials, p.81-89, 1967. Ref. (ASTM Special Technical Publication No. 416).

"Compared to the quality of water required for domestic and industrial use, the aquatic life of the Nation is not very demanding. To protect all water-use interests pollution must be defined, criteria for natural waters developed and standards for specific discharges fixed. Environmental control is essential if optimal conditions for aquatic life are to be developed and maintained."
TD370 N3 1966

71456 Young, J.V. Dams Unlimited. SIERRA CLUB BULL. 52(4):10-11, Apr.-May 1967. Illus., photo.

In a satirical letter to the editor the author lists advantages of damming rivers in wilderness areas. The Sierra Club should change its outmoded stance against progressive proposals such as Marble Gorge and Bridge Canyon Dams. Why not flood Grand Canyon and Canyon Lands National Parks and have aquatic parks? Then the Club might change its name to Dams Unlimited, or better still, Denaturing Unlimited.

71457 Zak, J.M., Wagner, J. Oil-base mulches and terraces as aids to tree and shrub establishment on coastal sand dunes. J. SOIL WAT. CONSERV. 22(5): 198-201, Sept.-Oct. 1967. Ref., photos., tables.

The findings in a study conducted to stabilize sand dunes near Provincetown, Mass., with the aid of oil-based mulches, indicated that trees and shrubs could be planted successfully without first establishing a primary ground cover. The best results were achieved when fuel oil was used. Tables and photographs illustrated this.

71458 Zugale, D. Living with an urban region. Parts I-II. SUBURB. LIFE, 37(8):28-33, Oct. 1967. Photos. 37(9):28-33, Nov. 1967. Ref., illus.

In a comprehensive essay on planning urban and suburban communities, successes and failures in community planning practices are discussed.

71459 Zundel, R. Anlage und Gestaltung von kunstlichen Seen in Waldgebieten unter besonderer Berucksichtigung von Erholung Fischerei und Jagd. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA, 7(26):339-352, 1967.

Installation and layout of artificial lakes in forest areas with special consideration for recreation, fishing and hunting. (translation of title)

71460 Ade, G. Hosteling: Another way to go. BET. CAMP. 8(9):24-27, Nov.-Dec. 1967. Photos.

The American Youth Hostels and bicycling afford an inexpensive form of transportation and recreation. Tips for travel, bicycle equipment and bicycle camping are given.

71461 Agnew, K. This business of camping. CAMP. GUIDE, (49):40, Apr. 1967.

In western North Carolina, a popular resort area in summer, many new camping sites of 1,000-1,200 sq. ft. have been noted. Such dimensions are too small. A suitable layout calls for developers seeking advice for sites of 2,500-5,000 sq. ft. Free advice on development is available from the Soil Conservation Service whose technicians will design campground layout and advise on roads and sanitary facilities. Town, county or State health departments require campground owners to submit plans to the health department before construction. Camping clubs should promote spacious sites.

71462 Aldrich, J. Soaring in the jet stream. SOARING, 31(12):22-25, Dec. 1967. Ref., illus.

In this article an aviation weather forecaster discusses the relation of the jet stream to soaring, and describes equipment and methods for studying jet stream characteristics.

71463 Alford, M.E. The Yukon Alpine Centennial Expedition. ALA. SPORTS. 33(5): 6-8, May 1967. Map, photos.

In that portion of Yukon Territory known as the St. Elias Mountains, 13 carefully selected teams of 4 men each will ascend 13 unnamed peaks which they will designate for a province or territory. The one centrally located will be called Centennial Peak. Another joint American-Canadian team will ascend a peak on the U.S.(Alaska)-Canadian border. Various individuals, clubs, and segments of the Canadian government and press have organized and financed the climbs. The Alpine Club of Canada will hold its annual camp in the St. Elias Mountains this year.

71464 Allen, R. British, French trailerists try U.S. rigs in cross-country tours. TRAIL. LIFE, 27(9): 42-45, 77-80, Sept. 1967. Illus.

The Wally Byam Foundation organized a Caravan America, a Caravan for 20 British families from Washington, D.C. to Santa Rosa, Calif., and a return trip for the same number of French families. The project was undertaken because the sponsors believe such a mode of travel across America offers a sure and excellent means for foreigners to acquire a favorable, lasting impression of America and the American people.

71465 An analysis of resort advertising in leading magazines during the first six months of 1967. RESORT MANAGE. 21(9):12, 14, Sept. 1967. Tables.

A detailed analysis of resort advertising in magazines shows a marked increase in number of pages covered and dollars spent for tourist promotion. Twenty popular magazines with comparative statistics for the first six months of 1966 and a similar coverage for 1967 are listed.

71466 Anderson, A.C. A camping guide adventure. Canyonlands National Park. CAMP. GUIDE, (50):10-15, 44, 46, 48-50, May 1967. Maps, photos.

Canyonlands National Park holds thrilling miles of canyons, with wind-carved cliffs towering hundreds of feet. There are also sculptured mesas and pinnacles; cliffs of cedars and pinon pines; canyon bottoms of tamarisk, cottonwood and willow; and ancient Moki ruins. Visitors enjoy the limitless variety of the Park by auto, jeep or canoe. Roads may be rough and require four-wheel drive equipment. Campgrounds in remote areas are primitive. The waters of the Colorado and Green Rivers provide fine planned wilderness canoe trips, one of which is recounted.

71467 Anderson, J. Rock and mineral collecting. MASS. WILDL. 18(4):6-8, July-Aug. 1967. Photos.

Advice is provided about rock and mineral collecting, including equipment information. Productive areas for rockhounders to explore in Massachusetts are emphasized.

71468 Angier, B. SKILLS FOR TAMING THE WILDS. A HANDBOOK OF WOODCRAFT WISDOM. Harrisburg, Pa., Stackpole. 286p. 1967. Maps, illus., photos.

The book is a guide for the outdoorsman on: (1) wilderness areas, trails and their facilities; (2) nature's weather signs; (3) clothing and equipment for outdoor activity; (4) suggestions on travel, backpacking, outdoor cookery, etc.; (5) skills with woodsman's tools; (6) health and safety guidelines; (7) wildlife and hunting. Illustrations demonstrate techniques. Sources for maps which locate trail routes are given.
SK601 A67

71469 Anyone for camping? BET. CAMP. 8(7):26-28, July-Aug. 1967. Photos.

A Family Camping & Outdoor Recreation Workshop co-sponsored by the University of Montana and the Confederated Salish and Kootenai Indian Tribes is held annually in Flathead Indian Reservation, Montana.

71470 Atts, E. The canoe. PA. ANGL. 36(11):8-9, Nov. 1967. Illus., photos.

Various canoes in use today are described. Size, shape, and handling ability are considered.

71471 Barnes, L. What's new in "Floribbean land." MOT. NEWS, 50(6):12-13, 24, 26-28, Dec. 1967. Photos.

The latest information on Florida recreation areas is given. Some cruises and tours of islands in the Caribbean are also listed.

71472 Bates, M. A naturalist at large. NATUR. HIST. 76(6):8, 10, 12, 16, June-July 1967. Photo.

Various aspects of man in his ecosystem are discussed. The conclusion is that today's troubles stem from the conceptual environment which man has created. Change is imperative.

71473 Batley, J.A. Safety: a hunter's responsibility. VA. WILDL. 28(11):9, 22-23, Nov. 1967. Photos.

Most hunting accidents can be prevented. Causes with suggestions for correction are enumerated. Ten cardinal rules for safe hunting are summarized.

71474 Beker, J. In-camp consultant. CAMP. MAG. 39(5):15, 16, May 1967.

The in-camp consultant can detect camp spirit lag, can assist in counselor supervision, and can work with campers or camper groups as needed. A short visit can usually accomplish wonders in providing "insight" into camp problems.

71475 Berglund, K. Speed on snow. SPORT. GOODS DEAL. 136(6):94, 230, Sept. 1967. Photos.

Snowmobiling increases in popularity each year. This article describes equipment, activities and events for snowmobile use in the northern States.

71476 Berry, B.J. Kinzua Dam-2100 acres of new fishing water. SPORTS AFIELD, 158(2):44-45, 74-75, Aug. 1967. Map, photo.

The Kinzua Dam near Pennsylvania's Allegheny National Forest offers potential for an excellent multiple use recreation area suitable for fishing, hunting, swimming, and skiing.

71477 Birmingham, S. The Sun Valley Set. HOLIDAY, 42(5):62-67, 134-140, 150, Nov. 1967. Photos.

The ski resort of Sun Valley in Idaho, built in 1936 by Averill Harriman and the Union Pacific Railroad, was the first American one. After a slump in the early sixties, the resort has become the "in" spot for the "beautiful people". In 1964 the Union Pacific sold the resort to the Janss Corporation, land developers of Southern California. An extensive building program has added many new facilities and the older buildings have been renovated. The visitors are the successful people who are well-known to their fellow Americans and to the world.

71478 Bjork, R. Ski sales still soar. SPORT. GOODS DEAL. 136(1): 101, 108, Apr. 1967. Photos.

In a survey conducted for the 1966-1967 season, the ski apparel and other items affecting the industry are discussed.

71479 Bloomfield, H.V.L. The ancient art of jousting. FORD TIMES, 60(7):8-11, July 1967. Photos.

Maryland's official sport, "tilting at the rings," or jousting, dates back to the Knights of the Round Table. The tournament, its romantic background, the skills involved and the rules of the game are described.

71480 Boardman, F. Winter backpack. APPALACHIA, 36(3):533-536, June 15, 1967.

This article describes a successful backpacking trip during extreme winter conditions and emphasizes the necessary plans and techniques. It gives helpful information to any leader planning a winter backpack hike.

71481 Boise Cascade meets leisure home demands. WEST. CONSERV. J. 24(4):32-33, Wood products annual. 1967. Photos.

Statistics on the leisure home market reflect the need for various size prefabricated houses within a particular price range. Here are described the various types of houses offered by Boise Cascade for both private and commercial recreation use.

71482 Boom on skates. AMAT. ATHL. 38(2):18, 30, Feb. 1967.

Since its inception 45 years ago the United States Figure Skating Association has increased from a total of 7 member clubs to more than 200 with 25,000 registered figure skaters. Much of this growth is attributed to famous skaters of the past and national exposure due to television.

71483 Bowman, E. Pleasure horses in the parks. NAT. PARKS MAG. 41(242): 4-6, Nov. 1967. Photo.

Camping opportunities, trails, and other park activities for horsemen at Logging Ranger Station in Glacier National Park are discussed. Comparison of the situation for rides in the Park prior to the provision of special facilities is made.

71484 Boy Scouts of America. FIELDBOOK. New Brunswick, N.J. 565p. 1967. Illus., photos.

This second edition of the FIELDBOOK is based upon the experiences of boy scouts, explorers, and scouters throughout the United States. It contains the latest information on rugged outdoor living. All aspects of outdoor living are covered. Ropework, winter camping, conservation of resources, and cooking are discussed. HS3313 A6B6 1967

71485 Boyce, A. Farmland for you. MICH. CONSERV. 36(5):20-23, Sept.-Oct. 1967. Map, photos.

The Federal Cropland Adjustment Program has opened 2000 Michigan farms to hunters and fishermen.

71486 Boyd, J.T. Casco Bay: Port of history. OUTDOORS, 8(12):12-13, May 1967. Photo.

The history and description of some of the islands of Casco Bay, Maine are provided for boating vacationists.

71487 Brewer, D., Gillespie, G.A. Estimating satisfaction levels of outdoor recreationalists. J. SOIL WAT. CONSERV. 22(6):248-249, Nov.-Dec. 1967. Ref., table.

The authors suggest that planners would do well to consider the socio-economic characteristics of communities adjacent to areas being planned. The results of a study aimed at measuring satisfaction levels in the St. Louis, Missouri area and a method of deriving a satisfaction index are discussed.

71488 Brown, C.O. Camping clinic to tutor tenderfeet. ARIZ. WILDL. SPORTS. 38(4):16-17, Apr. 1967. Photos.

Where to camp in Arizona, State regulations, methods of camping, safety precautions, equipment and clothing needed, camp cookery, backpacking, how to survive in the desert, and other desert camping instructions are provided in basic camping courses taught at the Phoenix Family Camping Clinic. This is the sixth annual Family Camping Clinic sponsored jointly by the Maricopa County Parks and Recreation Dept., and the American Camping Association.

71489 Bullwinkle, D. The costs of camping. CAMP. MAG. 39(4):14-18, Apr. 1967. Illus., tables.

The present article covers the operating income and operating expenses of four camps – two agency and two private camps – which were studied during 1966. Analysis figures from 1965 of these four camps are included, too, to aid in comparing costs, as well as some analysis this year. Tables illustrate the analyses of camp costs and also the percentage increase or decrease from 1965 on selected items.

71490 Burch, B. The forgotten sport of trout fishing. TENN. CONSERVAT. 33(4):11, 21, Apr. 1967. Photo.

A devotee of the "old school" of trout fishermen deplores modern innovation which make trout fishing a forgotten sport.

71491 Burch, W.R., Jr., Wenger, W.D., Jr. THE SOCIAL CHARACTERISTICS OF PARTICIPANTS IN THREE STYLES OF FAMILY CAMPING. Portland, Oreg., Pacific Northwest Forest and Range Experiment Station. 30p. 1967. Ref., maps, illus., tables. (U.S. Forest Service. Research Paper PNW-48).

Some selected findings from a camper survey made on the Three Sisters and Lake of the Woods areas in Oregon are presented in this paper. Included are details about ages, family size, economic position, and attitudes of the participants in three different camping styles, namely, easy access, combination, and remote. It was written primarily for those concerned with the planning and management of wildland resources for recreation areas.

71492 Burdge, R. J. OUTDOOR RECREATION STUDIES IN VACATION AND WEEKEND TRIPS. University Park, Pa., Pa. State Univ. 27p. 1967. Maps, tables. (Pa. State University. Dept. of Agricultural Economics and Rural Sociology. A.E. & R.S. No. 65).

This report contains tabulated information about people who take vacation and weekend trips for leisure purposes. The report is divided into three sections: vacation trips, weekend leisure trips, and the location of outdoor recreation areas where the individuals participated in activities. The study is intended for personnel involved in decision-making on the placement of recreation facilities. The summary section offers conclusions on the types of people who take vacations. Data for the report come from a random, stratified sample of people living in Allegheny County, Pa.

71493 Burrier, T. Front yard camping. OUTDOORS, 8(12):8-11, May 1967. Photos.

Camping boaters find an ideal location in Washington State's Puget Sound. On Orcas Island,

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largest of the Emerald Isles, is Moran State Park, 6,000 acres of timber and campground. Other moorings, marinas, boatels, campgrounds, ferries, cruises, natural scenic areas and activities for the vacationist are described.

71494 Byrd, R.C. Interpretive facilities center. PARKS RECREAT. 2(12):23-24, 50, Dec. 1967. Photos.

Harpers Ferry, W.Va., is the site of the Interpretive Facilities Center under construction by the National Park Service. The center will house the artists and craftsmen who produce interpretive program material, such as exhibits, films, publications, for the National Park System. Senator Byrd describes the present facilities of the town and reports on the functions of the Center.

71495 Camper maker pioneers in campsite development. TRAIL. LIFE, 27(8): 118-119, 150, Aug. 1967. Map, photos.

To keep pace with the increasing demand of mobile America – for the outdoor experience, Vista Liner, Inc., manufacturer of camper vehicles, has acquired and developed new camper sites throughout the Southwest.

71496 Canada. Dept. of Indian Affairs and Northern Development. AN ANALYSIS OF MOUNTAINEERING AND SKI TOURING REGISTRATIONS–BANFF NATIONAL PARK 1966-67. Ottawa. (Its Recreational Research Report 32). 26p. 1967.

Warden Service records of climbing and ski touring in Banff National Park are examined. The areas visited in the Park and some of the characteristics of the users are described.

71497 Carlin, J.W. (pseudonym) The Spartan market. The case for "incremental" accommodations. HOT. MOT. MANAGE. 182(6):24-28, June 1967.

There exists a gap in motivational research on the subject of domestic travel and tourism. A conjecture offered for the reason 80 million Americans do not travel is the high cost of lodging rates. In order to encourage these people to travel, rates must be lowered and "Spartan accommodations", e.g., clean, quiet, respectable rooms with no frills or luxuries, be provided. Well-known hotel or motel chains object to this proposal for they believe it would jeopardize their image to offer second-level accommodations.

71498 Carroll, H. Hawk Mountain. VT. LIFE, 21(4):24-27, Summer 1967. Photos.

On a mountainside high above Pittsfield, Vt. a striking new second home community called Hawk Mountain is in the process of creation. The Hawk Mountain Corp. offers a complete land design, building and property management package in an area attractive to skiers. The homes blend into the landscape and are designed with respect for natural beauty.

71499 Cochran, B. Inland sailing. VA.WILDL. 28(8):14-15, Aug. 1967. Photos.

The values and challenges of sailing are discussed.

71500 Connecticut. Dept. Of Agriculture and Natural Resources. CONNECTICUT BOATING GUIDE. Hartford, Conn., Boating Safety Commission. 71p. 1967. Illus., photos., tables.

The guide contains information on the following items: (1) legal requirements for boats and motorboats; (2) legal equipment requirements; (3) boat operator's operational requirements and responsibilities; (4) town ordinances in State and Federal waters; (5) procedures in accident reporting and enforcement; (6) aids and hints for safe boating. A nautical glossary is included.

71501 Cornish, G., Robinson, W. Good landscaping is an asset. GOLFDOM. 41(4):36-38. [36-38, 40-41.] April, 1967. Illus., photos.

Golf courses can be enhanced with the proper care of greens, fairways, and bunkers. This article offers ideas for the upkeep of these areas.

71502 Crelin, B. Skiing is here. SUBURB. LIFE, 37(10):30-31, Dec. 1967. Photos., illus.

The experience of Great Gorge, New Jersey, illustrates the potential for development of skiing facilities close to urban population centers. Article includes a directory of New Jersey ski clubs.

71503 Cullen, P. Industrial recreation in England. Part I. RECREAT. MANAGE. 10(7):14-17, 34, Sept. 1967. Photos.

A noted recreation educator examines the anatomy, the progress and decline, of the British industrial sports club and the role it should play in that nation's "recreation explosion."

71504 Cullen, P. Industrial recreation in England. Part II. RECREAT. MANAGE. 10(8):10-13, Oct. 1967. Illus., photo.

The future of industrial sports clubs lies in the application of a scientific and technological approach to the problems of production. Scientific management would do well to gear policies to automation and the changing needs of employees and community. Ideas and problem-solving techniques in European countries are compared.

71505 Davis, C. The call of the coast. HOLIDAY, 42(4):56-59, 78-82, Oct. 1967. Photos.

This essay probes the fascination of the coastal areas on Americans of all types. Encounters with inhabitants of the shoreline areas along the Atlantic, Gulf, and Pacific Coasts are reported and brief historical happenings are also included.

71506 Davis, T.N., III. Lawn bowls. PARKS RECREAT. 2(11):29-30, Nov. 1967. Photos.

Lawn bowls is an amateur sport played on a flat, level surface 120 feet long, similar to golf greens. Emphasis is placed on the physical fitness aspects of the game, which has little or no commercialism.

71507 Davis, W.C. VALUES OF HUNTING AND FISHING IN ARIZONA, 1965. Tucson, Ariz., Univ. of Ariz. 91p. 1967. Ref., illus., tables.

The Arizona Game and Fish Department authorized a survey of hunting and fishing within the State in 1965 to provide current information for use in improving the management of the State's sport fish and game resources and the outdoor recreation which they support. Objectives of the survey were to measure the economic contribution of the activities, to identify and analyze motivational values of hunting and fishing, and to record and present recommendations of hunters and fishermen for improvement of facilities and services.
SK51 D3 1965

71508 Diabetics can camp, too! SUBURB. LIFE, 37(6):38-39, July-Aug. 1967. Photos.

The New Jersey Diabetics Association's summer camp for diabetic children on Saddle Bay Lake provides facilities for camping experience under medical supervision.

71509 Dietz, L. Gunning Maine's ledges. DOWN EAST, 14(4):18-21, 44, Nov. 1967. Photos.

Hunting for sea-ducks is more demanding than regular duck hunting. Sea-duck gunning may be the fastest of wing-shooting sports in the East. The activity takes place on rocky ledges overlooking the open sea. The hunter must also be a seaman to retrieve his game.

71510 Do trailer/camper buffs want interstate travel trailer parks? TRAIL. LIFE, 27(10):62-63, 127, Oct. 1967. Photos.

To test the market for interstate travel trailer parks, the Sunray DX Oil Co. has established a prototype park, Tourrest, near Springfield, Missouri. The campsite includes complete trailer facilities and retail services for sundries, groceries and novelties.

71511 Dolan, M.M. Water skiing and the law. MOT. BOAT. 120(1):34-35, July 1967.

This article examines nine different liability suits which involve water skiing accidents. The causes and decisions of the court in these nine cases are discussed.

71512 Dowell, L. J. Recreational pursuits of selected occupational groups. RES. QUART. 38(4):719-722, Dec. 1967. Ref.

A survey of recreation participation was made in selected communities of northeast Arkansas and southeast Missouri. The differences which exist among various occupational groups – professional men, businessmen, city workers, rural workers – in their participation and interest in recreational activities were discovered. Reported here are the findings and authenticated conclusions from the survey.

71513 Driscoll, L.S. FAMILY CAMPING IN ALABAMA. Auburn, Ala., Agricultural Experiment Station. 30p. 1967. Maps, tables. (Alabama. Agricultural Experiment Station, Auburn. Bulletin 374).

The objective of this family camping study was to provide camper and camping data that might be of value to the public and private sectors in providing the type of campgrounds desired, and thus contribute to marketing of outdoor recreation services in Alabama. Characteristics and preferences of campers, trends in camping, including expenses and equipment, are provided.

71514 Du Bois, M. Expo Park's chief gives his views. AMUSE. BUS. 79(21): 26, June 3, 1967.

Projected attendance of 60 million people poses problems for Expo planners. Overcrowding calls for expansion of facilities and safety equipment. Good landscape design, and attention to traffic patterns, litter, and lighting are essential factors in creating a pleasant experience for visitors.

71515 Dumazedier, J. TOWARD A SOCIETY OF LEISURE. New York, Free Press. 307p. 1967. Ref., tables.

Translated from the French, this work discusses the status of leisure in modern European society and compares it with the leisure-time concept evolving in the United States. The book is divided into two parts. The first discusses leisure and the social system, including the historical and political development of increased leisure time. Relationships between work and leisure are given, such as the company sports team. The relationships between leisure and family life are also given. Most of an American's free time is spent at home. This affects the structure of the family. Today leisure has a new morality of happiness. Free time includes relaxation, entertainment, and personal development. The second part of the book deals with leisure and culture. Increased free time has had complicated cultural results in the U.S. Three kinds of uses of leisure analyzed are: travel, movies and T.V., and self-improvement. Differences between actively and passively spent time are explained. The last chapter contains some "tentative conclusions", which suggest more planning of leisure time by committees and organizations. Appendix A contains a critical review of the literature on leisure and popular culture in the U.S. Appendix B discusses the methodology of leisure time studies as revealed in the works of several American social scientists. There is also a list of references for the individual chapters which include numerous citations from French literature. GV14 D8

71516 Edwards, M. RECREATION LEADER'S GUIDE. Palo Alto, Calif., National Press. 194p. 1967. Ref., illus.

This book was written to provide the professional recreator with ideas and suggestions on how to build a well balanced recreation program for young children. Such a program should keep all ages of children active at the same time with a variety of activities. These activities should include: games, sports, handicrafts, nature, dramatics, clubs, hobbies, music, and dance. Included in each chapter are special activities and a description of related games. Activities and games are recommended according to age levels. GV14.5 E3

71517 Elrod, J.H., Kelley, J.R., Jr.

Cost analyses of sport fishing in commercial catfish ponds. In: Southeastern Association of Game and Fish Commissioners. PROCEEDINGS, 20th Annual Conference, 1966. Columbia, S.C. p. 273-278, 1967. Ref., maps, illus., tables.

To determine selected expenditures per trip, fishermen at two ponds of Auburn University's Fisheries Research Unit were interviewed as they fished for catfish and largemouth bass. At ponds S-1 (22 acres) and S-7 (2.5 acres) 13,528 people fished from September 15 to December 5, 1965 and from March 16 to June 16, 1966. Of these 1,434 were interviewed. Fishermen spent, in addition to the $1.00 pond permit fee, 89c per trip for bait and equipment, and $1.25 per trip for travel. The average round-trip distance traveled per fisherman was 34.5 miles. The individual average expenditure per trip was not related to day of the week. The gross expenditure was $1,740 per surface acre of water. Total permit cost was $13,528; bait cost, $6,872; equipment, $5,297; and travel expense, $16,931. Total expenditures were thus estimated to have been $42,628 for 150 days of fishing. SK361 S7 1966

71518 Emmett, J. Canoes make big splash. RESORT MANAGE. 21(8):8-9, Aug. 1967. Photo.

Because of size and weight, versatility, comparative safety, and modest cost, canoes are becoming increasingly popular at many resorts. Increases in canoe sales over the last ten years, maintenance costs and rental fees are discussed.

71519 Emmett, J. Channel to the sun. WATERSPORT, 1(2):4-11, Spring 1967. Map, photos.

The Intracoastal Waterway, which begins above Boston and extends 2900 miles to Brownsville, Tex., is used for vacation cruising as well as for commercial traffic. Fees at the various marinas along the route are given. Hazards enroute are also discussed.

71520 Ferguson, K. Sky-camping the Smokies. National Park's assets are unequaled. MOT. NEWS, 50(2):14-15, Aug. 1967. Photos.

Details about sights and recreation opportunity in the Great Smoky Mountains National Park are provided.

71521 Ferrier, B. "The Mackenzie Trail by canoe". EXPLOR. J. 45(3): 174-190, Sept., 1967. Maps, photos.

The author discusses a canoe trip made by himself and several companions over a period of years in which the paths of Alexander Mackenzie were retraced. Detailed descriptions of each trip include information regarding distances, water conditions, wildlife, scenery, and the like. Excerpts from Mackenzie's own writings are scattered throughout the article as the author attempts to compare the two trips made about 170 years apart.

71522 Fish, F.F. Sport fishery statistics from the inland waters of North Carolina. In: Southeastern Association of Game and Fish Commissioners. PROCEEDINGS, 20th Annual Conference, 1966. Columbia, S.C., p.404-408, 1967. Tables.

A survey extracted data from 28,454 Wildlife Protector interviews during the course of routine license and creel checks between April 1, 1964 and March 31, 1965. From this data, estimates – with respect to angler numbers, choice of gear, choice of baits, and catches – were made about the "rod-and-reel" sport fishing in North Carolina's inland waters. SK361 S7 1966

71523 Frey, H. Thermal protection: Part I. The history of dive suit development. SKIN DIV. MAG. 16(10): 52-55, Oct. 1967. Photo.

A research scientist at the N.Y.U.'s Geophysical Science Laboratory describes the development of modern diving equipment and relates it to physical, psychological and physiological needs of diving operations.

71524 Frey, H. Thermal protection: Part II. Physiological aspects of cold water submergence. SKIN DIV. MAG. 16(11):48-50, 68, Nov. 1967. Photos.

Analyzing the causes and effects of cold stress on divers, this article describes measures for protection and rewarming persons subjected to immersion in cold water for extended periods.

71525 Frome, M. A new age of walking Americans. APPALACH. TRAIL. NEWS, 28(3):31-32, Sept. 1967.

The article concludes that new roadways and campgrounds in the Great Smoky Mountains National Park will desecrate the natural features of the wilderness area, and discourage public participation in walking.

71526 Gabrielsen, M.A., and others. Park's activity centers about pool area. SWIM. POOL AGE. 41(8):16-17, Aug. 1967. Illus., photo.

Swimming is the focal point of any community recreation program. A "swimming pool complex" should include the following: Olympic size outdoor pool, diving pool, junior training pool, deck area, bathhouse, landscaping, parking, and a pool manager. Space should be set aside for future development.

71527 Gamison, L. "Natural Beauty." TRENDS PARKS RECREAT. 4(2):18-20, Apr. 1967. Photos.

There is a deep response in man to the human values found in the outdoors. A new national interest in the beauty around and the need to preserve it has spurred the beautification program. The article discusses aspects of beauty appreciation and dimensions of natural beauty programs.

71528 Garcia, J.L. Puerto Rico tourism: a big booming business. TRAV. TRADE, Sect. 2:3-4, Apr. 17, 1967.

According to the Commonwealth's Dept. of Tourism, by 1970 Puerto Rico will entertain 870,000 visitors, whose estimated expenditures will total 200 million dollars. To meet the needs of this burgeoning industry, facilities are expanding rapidly. Trends in tourism involving accommodations, escorts, facilities and sports are analyzed.

71529 Gethman, M.C. Hunting for the millions. FIELD STREAM, 72(5):61, 132-143, 150-153, Sept. 1967.

This article gives brief descriptions of hunting areas within a 200-mile radius of major American cities.

71530 Gibbs, K.C., Stoevener, H.H. CONSUMER INCOMES AND EXPENDITURES IN THE NEWPORT–TOLEDO AREA. Corvallis, Oregon State University. 17p. 1967. Ref., maps, illus., tables. (Special Report No. 237).

The survey was conducted in Oregon's Yaquina Bay area which contains many water-related recreation resources. Tourism and lumber are the predominant industries of Newport and Toledo, respectively. The survey objectives were: (1) to determine the relationship between income and consumption for the Newport-Toledo economy; and (2) to determine the relationship between consumption and other independent variables, in addition to income. Data were collected by a sampling of households–interviewing each household in the sample to discover its income and the corresponding amount of consumption in each of 17 expenditure categories. Survey findings reveal that total local consumption is a function, increasing at an increasing rate, of household size. It was shown, on the other hand, that total local consumption is a function, increasing at a decreasing rate, of disposable income. The methods followed throughout the survey and its analysis are explained in this special report and the equations used are also included.

71531 Gluck, H. Are you safe in camp? WOODALL'S TRAIL. TRAV. 33(11):60-61, Nov. 1967.

A law enforcement officer gives advice on protecting family and property on camping trips.

71532 Godbey, W.H. Fishing for Ozark cave trout. NAT. WILDL. 5(4):20-21, June–July 1967. Photos.

Caves in Arkansas and Missouri suitable for trout fishing and types of stocked and unstocked springs are discussed.

71533 Good growth enjoyed by NGF. GOLFDOM, 41(5):26-27, May 1967. Photos.

Distribution of NGF facility planning publications is up 82%, but a shortage of mortgage money at reasonable rates keeps the development of new courses down 16% for the same period last year. With the rapid golfer growth and general population increase, the U.S. will need more golf facilities in the years ahead.

71534 Greenwood, E.D. Emotional well-being through sports. JOHPER, 38(9):33-34, Nov.–Dec. 1967.

Dr. Greenwood, a psychiatrist on the staff of the Menninger Foundation, Topeka, points up the immeasurable benefits of lifetime participation in some sport. Recommended is a program to enable the individual to recognize the suitable activity, adapted to his age and physical ability, that serves as an acceptable outlet for his natural aggression and creativity and will benefit him physically and emotionally.

71535 Gregg, J.R., Gregg, B.K. A camping plan to see the U.S.A. BET. CAMP. 8(4):44-50, Apr. 1967. Map, photos.

An account is given of camping adventures through six southwestern States. Included is information on necessary equipment and other needs as well as a description of the natural beauty and geological formations of the land. A bibliography on travel in this region and general information appears in an inset at the end of the article.

71536 Gribbins, J. The cup course. MOT. BOAT. 120(2):28, 72, Aug. 1967. Map.

This article is a description of the course and regulations of the America's Cup Yacht Race.

71537 Gross, J.C. Uniform Monday holidays will boost employee travel. RECREAT. MANAGE. 10(7):18-20, Sept. 1967. Photos.

An excerpt of a statement made by James C. Gross, executive director of the National Association of Travel Organizations, in favor of bill S. 1217, to adopt uniform Monday holidays will increase travel, benefit the economy, and improve school and work attendance.

71538 Gurnee, R.H. Guides. NAT. SPELEOL. SOC. BULL. 29(2):61-62, Apr. 1967. Photo.

The cave guide is an important factor in making the visit a memorable experience for the tourist. This article gives the qualifications and personality characteristics of a good guide. It includes a minute biography of Stephen Bishop of Mammoth Cave, one of the most famous guides in cave history. It provides the general format of the usual tour talk and the information that Rio Camuy Cave guides should include.

71539 Harvey, M. The mysterious lake. DESERT, 30(7-8):44, July-Aug. 1967. Photo.

The camping, picnic sites and boat launching ramp at mysterious Mono Lake in the desert land of California are described. Camping facilities are also available in the Toiyabe and Inyo National Forests which almost surround the Mono Lake region. The alkali lake, hot springs, and cloud-shrouded mountains are described, and an account of local history is provided.

71540 Hauck, W.R. School for retarded uses water-based therapy. SOIL CONSERV. 32(12):283, July 1967. Photos.

The Laconia State School for the Retarded built a pond designed by the Soil Conservation Service to be used as a recreation facility by the children.

71541 Helminiak, R. Sailors of the sun. WIS. TALES TRAILS, 8(3):2-8, Autumn 1967. Photos.

The article discusses sailplanes and their cost and the requirements for a soaring license.

71542 Hersh, B. Sugarbush survives the abominable season. SKI, 32(1): 68-71, 98-99, Sept. 1967. Illus.

Life at Sugarbush, the Vermont ski resort, is radically different in the summer from the winter. The author discusses the people, interests, and sports of the village.

71543 Heyman, W. Learn to water-ski the "instant" way. MOT. BOAT. 120(1): 32-33, 57, July 1967. Photos.

Suggested techniques for the neophyte water-skier are illustrated.

71544 Hodge, M. Lake Erie marina facilities guide. LAKE. BOAT. 22(4): 41-53, May 1967. Map.

According to a recent study of dockside boating facilities on Lake Erie by Bowling Green State University, there are more than 12,590 ships and 115 marinas. Points of interest for visitors of the islands in Lake Erie are listed. Activities, services, and facilities available at the marinas are described. The National Association of Boat and Engine Manufacturers conducted a survey of boaters' desires in 1963 and reported these as important services: fuel, water, ice, repairs, tide and weather information, and electricity. Of less importance were recreation, housekeeping services, lockers, pools, lounge, bar, and dry cleaning services.

71545 Hogue, C.L. With net in hand. NATUR. HIST. 76(5):6-8, 10, 12, May 1967. Photos.

An essay on the habit and history of insect collecting explores some of the fact, and some of the fiction, connected with this unusual avocation. Notable collections in museums, sampling methods, scientific contributions of the activity, and the popularity of the hobby both in the United States and in Europe are discussed.

71546 Hovind, R. A state recreation plan – Wisconsin. In Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p. 119-131, 1967.

Recreation planning in Wisconsin was a part of a comprehensive two-stage effort which involved transportation, land use, populations, the economy and State facilities. The recreation plan was a combination of two main efforts, Demand, and Resources Analysis. Some of the specific problems and the results that were derived are detailed.

71547 Humphreys, J.R. THE LOST TOWNS AND ROADS OF AMERICA. REVISED EDITION. New York, Harper & Row. 196p. 1967. Map, photos.

This book describes a journey along forgotten roads and ageless towns between New Jersey and California. There are selections from various authors concerning the countryside and information for those interested in exploring historic places.
E 179.02 H84 1967

71548 Hunn, M. Boating boom in Dixieland. OUTDOORS, 8(12):20-23, May 1967. Photos.

Georgia boaters are cruising in every corner of the State, and a great expansion of facilities is in progress. Atlanta boasts more boats per capita than any other city in the Nation not situated directly on water. Most of Georgia's rivers have huge impoundments for boating, fishing and other water recreation. Lake Lanier is a popular water resource project of the Corps of Engineers. The State's massive boat–launching facilities are listed.

71549 Hunn, M. Clark Hill – Southern water playground. MOT. BOAT. 120(1): 40-41, 81-82, July 1967. Map, photos.

Clark Hill Reservoir built by the Corps of Engineers on the South Carolina-Georgia border provides great recreation potential in boating, fishing, swimming and camping for this area. It lies within a 170-mile radius of such population centers as Atlanta, Athens and Macon, Ga., and Greenville, Spartanburg, Aiken and Anderson in South Carolina.

71550 Hunn, M. Hidden waters. OUTDOORS, 9(1):25-28, June 1967. Photos.

Small boating in waters along the Tamiami Trail in Seminole country, Florida, is described. The location of boat launching ramps and routes along the Fakahatchee River are included in the description.

71551 Huyck, E.E. Long-range camping forecasts. CAMP. MAG. 39(7):15-16, Sept.-Oct. 1967.

The keys to camp planning lie in the proper analysis of such factors as urbanization, economic, and age trends. The demand for camping among retirees, for example, is expected to rise as their members increase.

71552 James, G.A., Tyre, G.L. USE OF WATER–METER RECORDS TO ESTIMATE RECREATION VISITS AND USE ON DEVELOPED SITES. Asheville, Southeastern Forest Experiment Station. 3p. 1967. (U.S. Forest Service. Research Note SE-73).

To ascertain relationships between water use and hours of recreation use by activity, pilot tests were conducted on two Forest Service developed sites. Linear regression analyses showed that the volume of water used on the test sites was highly correlated with recreation use.

71553 Jobson, J. The complete camper. SPORTS AFIELD, 157(5):59, 61-66, 70, 72-73, 76, 78, 80, 82, 84, 86-89, 91-92, May 1967. Illus.

In a comprehensive review of modern camping equipment, techniques and opportunities, all phases of the camping experience are discussed.

71554 Johnson, A. Hunting, fishing and private enterprise. IDAHO WILDL. REV. 19(6):3-7, May-June, 1967. Photos.

Idaho's public land for recreational purposes can be attributed to private enterprise. Plentiful fishing and hunting opportunities through landowner's generosity render shooting preserves and fee hunting unnecessary.

71555 Johnson, C. Lake Placid. FORD TIMES, 60(1):8-12, Jan. 1967. Illus.

Lake Placid, a winter sports center, is vividly described along with its frozen classic (bobsledding) and various other sports activities and spectator events.

71556 Johnson, J.L. Archery affects English history. TAM ARCH. WORLD, 16(12):52-55, Dec. 1967. Ref., illus.

The history and folklore of the bow and arrow in England are discussed.

71557 Kennedy, L.J. A swinging sea festival. MOT. BOAT. 120(5):21-24, Nov. 1967. Photos.

Events in the eight-day Sea Festival now in its second year at Long Beach, California are described. Regattas, fishing contests, boat races, and water skiing are making the Festival popular as an annual summer event.

71558 Lacrosse Hall of Fame. SPORT. GOODS DEAL. 136(2):138, May 1967.

Johns Hopkins University is the site of a hall of fame for lacrosse. It includes pictures of former great players and exhibits of equipment from earlier days.

71559 LaPage, W.F. CAMPER CHARACTERISTICS DIFFER AT PUBLIC AND COMMERCIAL CAMPGROUNDS IN NEW ENGLAND. Upper Darby, Pa., Northeastern Forest Experiment Station. 8p. 1967. Map, photos., tables. (U.S. Forest Service. Research Note NE-59).

A five-year panel survey, conducted to improve recreation enterprise management, discusses campers' leisure habits in private and public campgrounds in New England. Statistics indicate the differences in camping behavior, camping investment, and reasons for camping. Most apparent differences are the higher degree of mobility and larger dollar investment in camping equipment of commercial campground visitors. A re-survey of this panel of New England campers will be conducted annually over a five-year period.

71560 Lee, D. Camping through Florida. OUTDOORS, 8(12):25-28, May 1967. Map, photos.

Camping facilities for the various State parks in Florida are described. Advice is given on choosing a tentsite and caring for camping equipment.

71561 Lee, O. THE COMPLETE ILLUSTRATED GUIDE TO SNORKEL AND DEEP DIVING. Garden City, N.Y., Doubleday. 467p. 1967. Ref., illus.

This book is a "short encyclopedia of man's behavior underwater, his adjustment to the new environment, his equipment and techniques." Included also are the pleasures and profits, spearfishing skills, and U.S. Navy safety standards. This book as a most useful general work will be helpful to new divers and instructional to seasoned underwater veterans. GV 840 S78L4 1967

71562 Leslie, R.F. HIGH TRAILS WEST. New York, Crown Publishers. 278p. 1967. Ref., maps, illus., photos.

The book describes in detail the major trail systems of the western United States. The author has hiked all of these trails personally and describes trail hazards as well as unusual scenery in an enthusiastic and vigorous style. The lesser known trails take precedence over those which are overloaded with tourists each year. Of particular interest are the trails in the Utah Canyonlands and the Navajo trails. The book draws attention to this deserted portion of country filled with fantastic colors and magnificent wind formations. Rock collecting is emphasized, and much information is included of interest to gem and Indian artifact collectors. Advice about camp sites, burro procurement, trail selections, preparatory equipment, and experience needed by persons planning to explore some high trails West is provided. A glossary of terms is included. F 595.2 L38

71563 Lesure, T.B. Float twisting on the Snake. Embark on adventure by the Grand Teton. MOT. NEWS, 49(11): 20-22, May 1967. Photos.

Snake River, the Jackson Hole country, and the natural beauty of the Grand Teton National Park are described. The itinerary of the float trip which is offered daily during the summer provides the visitor unmatched scenery, glimpses of wildlife in comfort and at a reasonable cost.

71564 Let's go to library for equipment. SPORT. GOODS. DEAL. 137(1): 115, 124, Oct. 1967. Photos.

Rockland, Mass., has set up a pilot recreational library program through which athletic equipment and recreation reference material are available to the public.

71565 Levy, N. Sailing on ice. FORD TIMES, 60(1):32-37, Jan. 1967. Photos.

Hardwater sailors skim across a frozen lake faster than the wind. Information about the sport of iceboating and iceboating clubs is provided.

71566 Ley, R. Why anglers really angle. FIELD STREAM, 71(10):63, 109-110, Feb. 1967. Illus.

Why do fishermen really fish? It is not hunger except in the uncivilized wilderness. Sports fishermen are less interested in the fish for eating than in its pursuit. Fishing provides the rationale for escape from the press of people, business, and cares of the world and brings the fisherman close to nature in the outdoors.

71567 Lieber, J. The art of ship visiting. FORD TIMES, 60(1):2-7, Jan. 1967. Illus.

The nearest experience to feeling the glamour and excitement of ocean travel without actually doing it is to visit a large ocean liner docked in port. There are a number which can be visited in New York harbor by a ship-visiting buff. Other places, too, one can visit aboard ships until sailing time. Some of these places are Port Everglades, Florida; Norfolk, Boston, Philadelphia, Seattle, San Francisco, Los Angeles, San Diego, New Orleans, and Montreal or Vancouver in Canada. The article outlines the general procedure one should follow and gives necessary information and advice.

71568 Lincoln, J.C. Soaring in Arizona. ARIZ. HIGHW. 43(7):4-13, 28, July 1967. Photos.

Soaring as a sport began in Arizona in 1941 with the formation of the

Southwest Soaring Club. The progress of the sport, leading participants, and their contributions to the development of soaring are discussed. A basic glossary of terms includes definitions which differentiate between gliding and soaring.

71569 Little (Arthur D.), Inc. TOURISM AND RECREATION. A STATE–OF–THE–ART STUDY. Washington, U.S. Dept. of Commerce. 301 p. 1967. Ref., tables.

The American trend today is toward ever greater participation in outdoor recreation and travel among the fifty States. The present study assembled a wide data base in its survey of current research on travel and outdoor recreation in this country. Its information will be of value in the planning and promotion of a wide variety of travel and outdoor recreation activities, and in the measurement of their impact upon the regional economy.

71570 McCond, K. Are hunting seasons getting safer? MICH. CONSERV. 36(6):19-21, Nov.-Dec. 1967. Photo., tables.

Hunting accidents are discussed; examples are given. A table gives hunting deaths and injuries in Michigan from 1948 to 1966.

71571 McConnell, C.A. A survey of private and commercial shooting preserves in Tennessee. In Southeastern Association of Game and Fish Commissioners. PROCEEDINGS, 20th Annual Conference, 1966. Columbia, S.C., p.161-180, 1967. Ref., maps, illus., tables.

Since shooting preserves serve hunters and bring additional revenues to the State, the Tennessee Game and Fish Commission made this survey in order to help owners of preserves with some of their problems. Reported here, by narration and tables, are the survey findings and some recommended solutions to certain shooting preserve problems.
SK361 S7 1966

71572 McLarty, E.K., Jr. Spiritual values of camping. Part I. CAMP. MAG. 39(7):14-15, Sept.-Oct. 1967.

The spiritual values of camping are many, but the chief values are a sense of nearness to God and a sense of humility that breeds tolerance.

71573 Maas, P. The sport of stings. HOLIDAY, 42(4):50-53, 119-121, Oct. 1967. Photos.

Official croquet is much different from the familiar lawn variety and has been vastly underrated. This game calls for strategy, shooting skill, and a cool temper. The game originated in France in the 14th century, spread to Ireland, England, and India where it flourished in the 19th century. In this country, a National American Croquet Association was established with 17 clubs from Boston to Philadelphia by 1900. The American enthusiasts popularized the game in the 1920's in the East. After World War II croquet became an activity of certain screen producers and stars in California.

71574 MacFall, R.P. Fossils. NAT. WILDL. 5(5):23-27, Aug.-Sept. 1967.

Photos.

Fossil hunting and collecting is significant not only for its enjoyment as a hobby but also as a key to paleontological knowledge. Definitions are given for various fossils, kinds of fossils, the periods (measured in millions of years), and eras (measured in hundreds of millions of years). Equipment necessary for fossil collecting is listed.

71575 Madden, M.E. Know your C.C.C. TRAIL. LIFE, 27(12):54-55, 114-116, 120-121, Dec. 1967. Photos.

A Caravan Code of Conduct is outlined for that growing group of Americans who travel the "open road" in trailers.

71576 Madson, J. The hunters. NEV. OUTD. WILDL. REV. 1(4):13-15, 22, 24, 26, Winter 1967. Photos.

A wave of anti-hunting sentiment is building behind the current anti-gun legislation. Few non-hunters realize the need hunters have for elemental competition and the ancient, basic test of manhood which the sport provides. The hunter doesn't feel tenderness and love for animals but respect and pride. He kills them within a rigid ethical framework, out of a basic need to participate in wilderness in a traditional role.

71577 Magner, G.W. Mental health and camping. CAMP. MAG. 39(8):22-23, 29, Nov.-Dec. 1967.

Camping helps a child adjust to his present surroundings and mature in three ways: (1) realistic appraisal of one's self; (2) development of social relations; (3) identification with social models of behavior.

71578 Manley, F., Jr. Houses for mountainside living. VT. LIFE, 22(2):31-33, Winter 1967. Photos.

The style of architecture for ski lodges, or vacation houses, is becoming Americanized and is losing its Alpine influence as the sport of snow skiing increases in popularity in the United States.

71579 Matthews, W.B., Jr. A cruise through history. MD. CONSERV. 44(4):21-25, Aug. 1967. Map, photos.

The sights and activities which visitors can experience in cruising around the Chesapeake Bay and historic tidewater Maryland areas are related in this article.

71580 Matthews, W.B., Jr. In the wake of the skipjacks. MOT. BOAT. 119(4):32-33, 68-69, Apr. 1967. Photos.

The author charts the cruise on the Chesapeake Bay from which Captain John Smith made the first map of the area in 1608. Just four years ago, Emmett Andrews of Cambridge, Md., promoted the idea of an annual tourist cruise which retraces sections of Captain Smith's voyages. This has proved so popular that Andrews now charters four skipjacks to handle the voyagers. Local color is provided in the period costumes of the crews and visits from friendly and sometimes unfriendly Indians who paddle out from shore. These visitors are usually the Boy Scouts who masquerade like the original inhabitants of the Bay area.

71581 Meyer, C.R. North Fork of the Whale's Fluke. OUTDOORS, 8(12):29-33, May 1967. Photos.

The North Fork Area, comprised of Great and Little Peconic Bays plus Long Island Sound provides enough cruising and fishing to last a decade. Providing recreation for the heavy industrialized New York region, old towns, such as Southold, provide historic interest. Boating clubs and beaches add recreation interest.

71582 Meyer, R., Jr. FESTIVALS U.S.A. & CANADA. New York, Ives Washburn. 280p. 1967.

The varied cultures found in the United States and in the Canadian provinces are revealed in many of their festivals. Examples are the Olde English Elizabethan Yuletide in British Columbia, the Inter-American Festival of the Arts in Puerto Rico, the Oktoberfest in Wisconsin, the Whaling Festival in Hawaii, the Midnight Sun Festival in Alaska, the Round Hill Highland Scottish Games in Connecticut, the Mardi Gras in New Orleans, Corn-on-the-Curb Days in Minnesota, Old Spanish Days in California, and North American Indian Days in Montana. This book describes all kinds of festivals – agricultural, arts and crafts, floral, music, community, fish and lobster, forest, holiday, dance, film, Indian, sports, and folk festivals – as well as fairs, livestock shows, beauty pageants, and winter carnivals.
GT4002 M4

71583 Milek, B. The backpack hunter. AMER. RIFLEM. 115(4):28-31, Apr. 1967. Photos.

Hunters can achieve greater hunting success in remote sections where game is plentiful and hunters are scarce or virtually non-existent. A description is given for equipment necessary for backpack hunting in remote areas.

71584 Miller, R.G. Boating. Directory of Pennsylvania marinas, access areas and boat rental facilities. PA. ANGL. 36(5):20-21, May 1967. Map.

This directory provides a map and description of boating facilities on that section of the Delaware River between the Tacony-Palmyra Bridge to the mouth of Neshaming Creek.

71585 Miller, S. Wilderness hunting on the East Coast. AMER. RIFLEM. 115(9):63-65, Oct. 1967. Map.

For hunters in crowded eastern United States, New Brunswick, Canada offers a lack of hunters and an abundance of game. Deer, bear, birds, and varmints are plentiful. Guide fees and suggested equipment are considered.

71586 Murray, W. Hanging five. HOLIDAY, 42(3):62-67, Sept. 1967. Photos.

Riding the ocean waves on surfboards has increased in popularity since 1965 when surfing first became a craze. Two types of surfers are described. The serious dedicated group have established their own subculture within society, with lingo and casual looks. For them life has become an endless summer in search of the perfect wave. Names of outstanding devotees of this new water sport are listed. The California coast is the mecca for the serious surfers.

71587 Newman, J., Newman, B. THE FAMILY CAMPING GUIDE. Cleveland, World Publishing Co. 244p. 1967. Ref., illus., photos.

The practical necessities of family camping are covered by this book. It provides a packing list, simple recipes, advice for beginners, and other useful information for average family campers. SK 601 N65

71588 Northnagel, E.W. Santa Clara's model campgrounds. N.MEX. MAG. 45(5):2-5, 36, May 1967. Map, photos.

An ideal place for "fair weather campers" – a family with toddlers and old folk, and who have limited time, budget, and equipment – is Santa Clara Canyon. Here such campers can camp or picnic in a good campground with facilities that include good water, dry firewood, and a fishing stream nearby. Santa Clara can boast of towering mountains, majestic pines, colorful cliffs, wildflowers, wildlife, and cool summer temperatures to enhance such activities as fishing, camping and picnicking.

71589 Oertle, V.L. Rigging for wilderness roads. DESERT, 30(7-8): 47-48, July-Aug. 1967. Photos.

Pointers in car check-up and handling as well as equipment necessary for wilderness trip preparation are discussed.

71590 Oldham, W. Let's put the show back in horse shows. APPALOOSA NEWS, 22(4):2-5, Apr. 1967. Illus., photo.

Suggestions are made for reviving the popularity and the success of horse shows. Management techniques and promotional media are stressed. The importance of the spectator as a potential exhibitor is mentioned.

71591 Ormond, C. A Montana school for guides. GUNS HUNT. 11(8):30-33, 67, Aug. 1967. Photos.

The Bitterroot Enterprises, Inc., Erv Malnarich Outfitters Guide School, includes subjects on: horsemanship; guiding; game and animals; fishing; camp routine; safety; botany; general orientation; equipment; food services.

71592 O'Sullivan, J.L. Sylvania: A new recreation treasure. BET. CAMP. 8(7):38-41, July-Aug. 1967. Map, photos.

Sylvania's pristine area of 18,870 acres (bought by the U.S. Forest Service in July 1966) and its fishing, wildlife, and timber resources offer good recreation. Forest Service plans are to eventually accommodate 500-1200 campers.

71593 Outdoor Life Magazine. THE CAMPING MARKET. 2nd edition. New York, N.Y. 30p. 1967. Ref., tables.

This is an up-dated version of the first (1965) comprehensive market summary on camping – one of America's great markets.

71594 Patterson, P.D. Cycling into history. The story of the pneumatic tire. AMER. CYCL. 6(4):8-9, June 1967. Photos.

Here are historic highlights on the sport of cycling. Included is the tale of how cycling led to the invention – by John Boyd Dunlop of Belfast, Ireland – of the pneumatic tire, with its subsequent effect upon cycling, cycle races, motor cars, and even airplanes.

71595 Peterle, T.J. Characteristics of some Ohio hunters. J. WILDL. MANAGE. 31(2):375-389, Apr. 1967. Ref.

"Some attitudes and characteristics of 4,300 buyers of Ohio hunting licenses were determined by the replies to a mailed questionnaire. Compared to the average Ohio male, the hunters who responded were on the average, younger, slightly better educated, earned a little more money, more apt to be married, and probably had a larger family." Reading habits, attitudes on wildlife management and wilderness preservation are also reported.

71596 Pettingill, O.S., Jr. Bird finding – Virgin River country. AUDUBON, 69(4):6-10, 12, 14-15, July-Aug., 1967. Map, photos.

The author discusses the species of birds found on the Virgin River southwest of Zion National Park in southwestern Utah. Detailed directions and planned itinerary are outlined for bird enthusiasts planning a trip to the area. Roland Wauer's experiences in encountering uncommon species of the area are recalled.

71597 Pettingill, O.S., Jr. Bird finding – western Oregon. AUDUBON, 69(6):6-24, Nov.-Dec. 1967. Photos.

In the western Oregon regions of the Cascades, the Willamette Valley and the Columbia River, many species of birds are found because of the variety of natural habitat. A planned itinerary is presented for birders planning a trip to these areas.

71598 Phillips, R. The Colorado fourteens. A condensed guide. TRAIL TIMBERL. (582):103-118, June 1967. Map, photos.

This guide lists only those Colorado mountains with elevations greater than 14,000 and the preferred routes for climbers.

71599 Pirrung, V. "...Worth a voyage..." MD. CONSERV. 44(4):8-10, Aug. 1967. Photos.

Sixth graders from Montgomery County camped in the outdoors for a week and explored, observed and learned from nature. They camped at Mar-Lu-Ridge on the Catoctin Mountain near the Potomac River. The basic purpose of the trip was to give an outdoor experience that would result in positive scientific attitudes, knowledge, skills, and appreciation.

71600 Prichard, V. Ascending two giants. SUMMIT, 13(4):8-13, May 1967. Maps, photos.

Located at opposite ends of Rocky Mountain National Park like lofty sentinels stand Longs Peak and Mount Richthofen. Descriptive information about each and advice on the upward hikes are given.

71601 Reynolds, J.A. The role of trees in passive recreation. ARBOR. NEWS, 32(4):25-29, Apr. 1967.

The Director, Department of Recreation and Parks, Richmond, Va., in a speech before the International Shade Tree Conference in Richmond, March 1967, proclaims the value of trees as a refuge from the pressures of urban living. In relation to trees, "passive recreation" may be divided into three groups. The tree fulfills a need for association with nature, aesthetic appreciation, and restful relaxation.

71602 Richards, I. White water. TRAIL TIMBERL. (581):83, 86, May 1967.

The sport of whitewater canoeing offers many opportunities for thrills. This article describes different events in which a canoe or kayak may compete.

71603 Robbel, H. The role of shooting for recreation in Germany. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):310-329, 1967. Ref.

The role of shooting for recreation is investigated by interview methods. The scope of shooting in Germany and the relationship between shooting and recreation are shown by means of shooting motives. Public opinion does not view shooting as recreation. The author concludes that shooting is by its intrinsic characteristics, not suited to supply recreation to a large portion of the population. In Germany, it cannot be classified as a typical form of outdoor recreation.

71604 Rosko, M. Successful surf fishing. FISH. WORLD, 14(3):32-35, May-June 1967. Illus., photos.

"Heading" the surf for both shore and offshore fishing is discussed.

71605 Rounds, G. Who invented water skiing? SOUTHW. HOL. 21(6):8, 12, 14, June 1967. Photo.

Three versions of the controversial question of the origin of the growing popular sport of water skiing are briefly discussed.

71606 Ruffin, A.F., Jr. This game called skeet. Part 2 – The NRA skeet program. AMER. RIFLEM. 115(8):26-27, Aug. 1967. Illus.

The development of international skeet as a highly competitive international sport is described. The United States originated the sport and leads the world in the number of skeet shooters. The National Rifle Association, designated by the International Shooting Union (ISU) to represent shooting sports in the U.S., has developed programs to promote international shooting and name and support teams of U.S. shooters for international competitions. Techniques and the rules for the game are described.

71607 Sandstrom, S. 'Cruises' by car...why not? TRAV. TRADE, 75(9): 56, 61, Mar. 1967.

With a potential market of 60,000,000 motorists as 87% of travel today is by car, one travel agent suggests the promotion of car tours. Possible procedures are proposed.

71608 Satran, D. Ski Wisconsin! WIS. TALES TRAILS, 8(4):2-7, Winter 1967. Photos.

The story of ski promotion in Wisconsin is described against a historical background of recreational skiing from its beginnings in Scandinavia to its introduction in America.

71609 Saunders, C.A. 'Too many chiefs' plague archery. SPORT. GOODS. DEAL. 137(1):110, 112, Oct. 1967. Photos.

Currently four national organizations exist for archery recreationists. This article discusses problems of achieving uniformity of equipment standards, scoring, and target design through cooperative efforts.

71610 Shuttleworth, G. Read a map. TRAIL. LIFE, 27(12):49, 79-80, Dec. 1967. Map.

Technique of reading topographic maps for greater enjoyment of vacation trips is described. Sources of free State and Federal government materials are listed.

71611 Ski-bobbing... A new winter sport for State recreation? BADG. SPORTS. 23(9):11, Apr. 1967.

Kenneth W. Haagensen, Executive Vice-president of the Wisconsin State Chamber of Commerce, is enthusiastic about European ski-bobbing as a new winter sport. Recreation leaders should give consideration to this new sport to boost the Wisconsin economy. It appeals to the over-forty group and can be mastered by non-skiers within a day or two. The ski-bob and its capabilities are described.

71612 Snowmobiles score high with guests. RESORT MANAGE. 21(10):10, Oct. 1967. Photo.

With the advent of snowmobiles, many communities formerly closed in wintertime have become year-round resorts. Snowmobile operations at some resorts include day-long scenic tours. Fees and services offered at several areas are described.

71613 Snyder, R.E. THE SPORTING GOODS MARKET IN 1967. Chicago, National Sporting Goods Association. 47p. 1967. Illus., tables.

The National Sporting Goods Association has sponsored a series of studies about the sporting goods market in the United States for several years. These studies point up the position of the sporting goods market, how it relates to the larger economic scheme and what is the sporting goods share of the total recreation dollar. The 1967 study contains comparisons with 1966 and 1965 sales, as well as projections to 1970.

71614 Solymosi, F. How good a skier can you be? What makes a good skier? SKI, 32(3):103-107, 126-127, Nov. 1967. Illus.

The author describes a set of physical factors that can be used to predict ski ability. From testing beginner, intermediate, and advanced skiers, he determined that balance, leg strength, and coordination are the most important factors. Exercises which improve each of these abilities are discussed.

71615 Starch (Daniel & staff). THE PRIMARY TRAVEL MARKET. THE 1967 STARCH ANALYSIS OF THE TRAVEL MARKET. New York, Time Marketing Information. 17p. July 1967. Tables. (Time Marketing Information. Research Report No. 1418).

Tables show the statistics on domestic air travel during the past year, foreign travel during the past five years, broken down by geographic areas, travel expenditures in the past year, use of travelers' checks in the past year, ownership of credit cards, passport ownership, and car rental.

71616 Starch (Daniel & staff). A PROFILE OF AFFLUENCE: THE ADULT MALE SKIER. New York, Universal Publishing and Distributing Corp. 9p. 1967.

This SKIFACTS report tabulates specific activities of 55,981,000 males of 18 years or older; of whom 16,052,000 live in households with annual incomes over $10,000; and 6,332,000 live in households with incomes of $15,000 or more. The report includes air travel data, car rental, credit cards, foreign travel, travelers checks, and personal insurance coverage data.

71617 Stebbins, J.R. The sage grouse. AMER. RIFLEM. 115(8):46-47. Aug. 1967. Map, photos.

The sage grouse is the largest of the upland game birds and weighs as much as 8 lbs; this bird flying at speeds up to 50 miles per hour makes for most difficult hunting.

71618 Sterling, E.M. TRIPS AND TRAILS. CAMPS, SHORT HIKES AND VIEWPOINTS IN THE NORTH CASCADES AND OLYMPIA. Seattle, The Mountaineers. 211p. 1967. Ref., maps, photos.

The keynote of camping is fun. Hiking on trails away from the campground is the best way to achieve pleasure and satisfaction from the camping experience. To help the hiker accomplish these ends, this book lists with maps the trails leading from campgrounds and roadways. Almost all the hikes are confined to two miles or less and could be completed within three hours. Interesting sites in each area are listed with necessary precaution for safety. F851.7 T7

71619 Stoevener, H.H., Brown, W.G. Analytical issues in demand analysis for outdoor recreation. J. FARM ECON. 49(5):1295-1304, Dec. 1967. Ref., tables.

Many of the approaches to the analysis of recreation demand are still in the theoretical stage. This article presents the pros and cons of several criteria of demand for outdoor recreation.

71620 Tanler, W. Two greens are better than one. GOLFDOM, 41(5):42-44, 72, May 1967. Illus.

Because of excessive use, the Ala Wai golf course in Hawaii is installing two greens on each hole. This system allows for one set of greens to be played while the other is being maintained.

71621 Taylor, Z. Houseboats. SPORTS AFIELD, 158(6):49-61, Dec. 1967. Illus., photos.

This article covers all phases of house boating from the use as a "base camp" to equipment, buying, renting, and maintaining the boat.

71622 Tiller, W. The silent sport. TEX. PARKS WILDL. 25(9):2-5, Sept. 1967. Photos.

Hunting deer with bow and arrow is gaining in popularity since it enhances enjoyment of the hunt as a sport. Equipment and techniques of bow hunting are given.

71623 Tinker, G. THE SKIN DIVER'S TRAVEL GUIDE. PAM AM'S GUIDE TO SNORKELING AND SCUBA DIVING IN BERMUDA, THE BAHAMAS, THE CARIBBEAN, AND THE MEDITERRANEAN, Garden City, N.Y., Doubleday. 338p. 1967. Ref., maps, photos.

This guide to shallow-water snorkeling, spearfishing, underwater photography and deep-water scuba diving is divided into 2 parts: part 1 covers the islands in the Atlantic; part 2 covers the Mediterranean. Each chapter is divided into 2 parts: general information and skin diving information. The general tourist information consists of: how to get there, customs regulations, travel documents required, currency, hotels, transportation. The skin diving information consists of: laws; diving gear for sale; diving gear for rent; guides, boats, instruction; compressed air; currents, and winds. GV840 S78T5

71624 U.S. Bureau of Outdoor Recreation. THE 1965 SURVEY OF OUTDOOR RECREATION ACTIVITIES. Washington, D.C. 210p. 1967. Ref., tables.

The report is primarily a summary of the 1965 nationwide survey of participation and preferences for outdoor recreation activities. It has been prepared to give recreation planners and others current information on participation in outdoor recreation activities. Survey design and procedures, definitions, estimates of statistical reliability, and numerous tables are also included.

71625 U.S. Bureau of Outdoor Recreation. NORTHERN NEW ENGLAND VACATION HOME STUDY, 1966. Washington, Department of the Interior. 3v. 1967. Ref., photos, tables.

Designed to develop measures of the extent to which occupants of vacation homes participate in outdoor recreation and the amounts they spend in connection with their vacation homes, this study presented information of value to planners. It should enable them to assess the impact of vacation homes on public outdoor recreation resources and facilities; to determine the extent to which recreation facilities at vacation homes supplement public outdoor recreation opportunities; to evaluate the economic impact of vacation homes on regional and local economies; and, on the basis of the previous three, to project the role of vacation homes in supplying outdoor recreation opportunities. Appendix I covered the technical details of the design and methods used, and Appendix II presented the tabular data developed in the study.

71626 U.S. Congress. Senate. Committee on Commerce. REGULATION OF PARACHUTE JUMPING. Hearing. Washington, Govt. Print. Off. 63p. 1967. (90th Congress, 1st sess. Serial no. 90-53).

Sky diving has grown dramatically since 1956 when 200 jumps were recorded. Because of the danger involved and a sharp increase in the number of fatalities, the Senate Aviation Subcommittee of the Committee on Commerce held hearings on adequate regulations for this new sport. S. 2137 was introduced to provide, in the interests of safety, for the regulation of sport and commercial parachute jumping. Testimony is presented by a Congressman, an FAA official, and representatives of the aviation industry and aeronautical association. The committee considered the rules of jumping under various weather conditions, the licensing of instructors and equipment, and methods of research that contribute to the safety of the sport. Licensing of amateur parachutists was considered but it was felt that this was out of the jurisdiction of the Federal Aviation Administration. The economic impact of the sport is growing; more pilots are needed for lifting parachutists; more instructors and more parachute riggers are necessary to provide service to jumpers. K38 C7 90 No. 53.

71627 U.S. Dept. of Agriculture. Economic Research Service. THE ECONOMIC IMPACT OF RETIREMENT IN THE RESORT AREAS OF ONEIDA AND VILAS COUNTIES, WISCONSIN. Madison, Univ. of Wisconsin. College of Agriculture. 32p. 1967. Ref., map, tables.

This study examines the economics and social impact of the retiree in a selected recreation area of Wisconsin, namely, Vilas and Oneida counties. The present and future needs of retirees are considered. Statistics are furnished on "immigrant" and "native" retirees for: (1) income, (2) living expenses, (3) capital investment, and (4) net worth.

71628 Unlocking the canyon country. SUNSET, 138(5):82-91, May 1967. Maps, photos.

This article yields detailed information on what a tourist can see and do in Utah's Canyon Country, particularly in the Canyonlands National Park.

71629 Wenatchee National Forest Staff. Use of the back country. TRAIL TIMBERL. (585):162-164. Sept. 1967.

The staff of Wenatchee National Forest provides a guide to conduct for wilderness and back country camping.

71630 Whitman, B. City fishing. PA. ANGL. 36(8):16-17, 25, Aug. 1967. Photos.

Too few fishermen realize the possibilities of fishing in a city. Most cities are located on major waterways and inhabitants can find opportunities near their own homes.

71631 Wood, G. Trail-bike camping. SPORTS AFIELD, 158(2):54-58, Aug. 1967. Photos.

Motor bikes offer campers opportunities for versatile and efficient travel and camping experience. This article gives tips on bikes and camping practices.

71632 Allison, S.V. COST, PRECISION, AND VALUE RELATIONSHIPS OF DATA COLLECTION AND DESIGN ACTIVITIES IN WATER DEVELOPMENT PLANNING. Berkeley, Calif., Univ. of California, Hydraulic Laboratory. 142p. 1967. Ref., maps, illus., tables. (Contrib. No. 120).

The problem of allocating available water resources between diverse activities is presented. A method of solution based on mathematical decision techniques is proposed and tested in the modeling of ground water reservoirs. Results showed a high degree utility in the proposed method. The conceptual framework on which the proposed method is based depends on the definition for each activity of the relationship between the cost of the activity and the precision attained. In addition, the degree to which this precision affects the attainment of the overall objectives of the planning program is taken as a measure of the value of precision in each activity. The expression of these cost-precision and value-precision relationships in quantitative terms provides the basis for the application of mathematical decision techniques. The problem may be formulated either in terms of maximizing overall precision subject to a fixed budget constraint or minimizing the cost of attaining a specified degree of overall precision. These concepts are applied to a real problem, that of building a mathematical model of the ground water reservoir underlying the southern end of the San Joaquin Valley in California. Optimal programs of collecting and manipulating required data are defined, and applicability of mathematical decision techniques, to the solution of problems of this nature, is demonstrated.

71633 American Association for Health, Physical Education and Recreation. Research Advisory Committee. Psychological values of lifetime sports. JOHPER, 38(9):33-37, Nov.-Dec. 1967. Photo.

The testimony of two doctors and one professor of physical education supports the need for expanded research in the relationships between physical activities and man's physical and psychological tensions. A growing complex society and an increase in leisure time emphasize the social and psychological values of lifetime sports to man's well-being.

71634 Arnold, R.K., Hopkins, W.S. Scope of recreation research. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):1-13, 1967.

The scope of outdoor recreation research is examined and described under three headings: (1) human values and needs in outdoor recreation; (2) controlling recreation area ecosystems; (3) allocation and management of resources for outdoor recreation. Major recreation research programs must be enjoined soon if economic development potentials are to be realized, if the problems and opportunities and multiple use of forest lands are to be coordinated, and if we are to provide for the growing importance of leisure time pursuits.

71635 Baddeley, A.D. Diver performance and the interaction of stresses. In Underwater Association.

REPORT 1966-67. Carshalton, Surrey, Eng., T.G.W. Industrial and Research Promotions. p.35-38, 1966. Ref., tables.

A number of experiments are discussed on the interaction between inert gas narcosis and the stresses connected with deep sea diving. The first two studies showed a much greater drop in diver efficiency at depths in the open sea than was expected on the basis of performance at an equivalent pressure in a dry chamber. A third experiment did not show this exaggerated effect. After examining the diving conditions during the three studies, it was suggested that the drop in efficiency at depth was probably due to anxiety. CC65 U56 1966/67

71636 Bray, O.E. Studying the black bear in Yellowstone National Park. NAT. PARKS MAG. 41 (239):10-12, Aug. 1967. Photos.

The methods used to study the Yellowstone National Park black bears are described, giving information on the black bear-park visitor relationships. Ear-streamer tags are useful in obtaining data on the population, activities, and habitat of the bears. Over a two-year period these research projects will provide enough data to develop a management plan for alleviating conflict between the black bear and the rapidly increasing number of visitors.

71637 Brunger, A.G., Nelson, J.G., Ashwell, I.Y. Recession of the Hector and Peyto Glaciers: Further studies in the Drummond Glacier, Red Deer Valley Area, Alberta. CAN. GEOGR. 11(1):35-48, 1967. Ref., maps, photos., tables.

Study of the Hector and Peyto Glaciers was carried out during 1965 and 1966 as part of a programme of glacial and geomorphological studies which began in the Canadian Rockies in 1962. Estimates of the recession of the Hector and the Peyto were based on photographs, tree-ring data and measurements of ice wastage conducted by the Federal Water Resources Branch.

71638 Burdge, R.J. OUTDOOR RECREATION: AN ANNOTATED BIBLIOGRAPHY. University Park, Pa., Pa. State Univ. 109p. 1967. (Pa. State University. Dept. of Agricultural Economics and Rural Sociology. A.E. & R.S. No. 66).

This is a comprehensive set of references dealing with leisure and outdoor recreation, compiled in alphabetical order by author. The listing has a sociological orientation, although most of the references are from other fields. Except for selected books and other bibliographies of outdoor recreation, the intent is to include only research reports. Short annotations are provided for most of the citations, and classic studies from each of the disciplines conducting research in outdoor recreation are included.

71639 Byrd, O.E. Studies on the psychological values of lifetime sports. JOHPER, 38(9):35-36, Nov.-Dec. 1967. Photo.

Dr. Byrd, professor of Health Education in Stanford University's School of Education, reports on medical surveys and experiences of several physicians who attest to the values of sports and physical activities in the treatment of the mentally ill. A limited amount of research on the values of lifetime sports participation for persons not mentally ill was undertaken in 1963 at Stanford University. The method and results are described.

71640 Chance, B., Sr. Sailing yacht research. SCIENCE, 156(3773): 411-412, Apr. 21, 1967.

The report of a symposium on sailing yacht research, held at the Massachusetts Institute of Technology in November, 1966, summarizes papers dealing with hydrodynamics and aerodynamics of yacht design and construction, methods of testing sail performance, and problems of stability.

71641 Cobb, S. Reverence for life. FLA. NATUR. 40(4):119-121, Oct. 1967. Photos.

The improper use and control of DDT are discussed; an appeal is made for its removal from the open market.

71642 Curry-Lindahl, K. Recreation and wildlife research in tropical forests. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26): 93-124, 1967. Ref.

The wide range of tropical forests is enumerated. Each of these forests has specific problems in relation to utilization, conservation and research but the primary problem of tropical forests is their proper use. The key to an objective understanding of this rich habitat lies in ecological research and the correct interpretation of the results obtained.

71643 Curtis, H.S. Wildlife for forest recreation in Australia. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):125-131, 1967. Map.

The position with regard to recreation and wildlife in Australian forests differs in various aspects from that of other countries. As a result, problems which arise and the concept of what wildlife includes are affected. Australia differs greatly from other countries in its physiography and its indigenous plant and animal life. These are described and a wide spectrum of wildlife rather than a few important groups is considered.

71644 Hawk, V.B., Sharp, W.C. Sand dune stabilization along the North Atlantic coast. J. SOIL WAT. CONSERV. 22(4):143-146, July-Aug., 1967. Ref., maps, photos., table.

Studies were conducted on the planting, the care and the fertilization of American beachgrass, the key plant in stabilizing Atlantic coastal dunes. Various experiments of individuals and municipalities to preserve the dunes are briefly discussed. Other species such as European beachgrass and American dune-grass, with potential value for primary dune stabilization, are under test at the Cape May Plant Materials Center.

71645 Holroyd, J.C. Observations of Rocky Mountain goats on Mount

Wardle, Kootenay National Park, British Columbia. CAN. FIELD NATUR. 81(1):1-22, Jan.-Mar. 1967. Ref., maps, photos., tables.

Observations were made on the behaviour and life history of a band of Rocky Mountain goats on Mt. Wardle, Kootenay National Park, British Columbia from January, 1962 to February, 1964.

71646 Huse, S. Voraussetzungen und Aufgaben einer forstlichen Erholungsforschung in Norwegen. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):147-153, 1967.

Hypotheses and problems of forest recreation research in Norway. (translation of title)

71647 James, G.A. RECREATION USE ESTIMATION ON FOREST SERVICE LANDS IN THE UNITED STATES. Asheville, N.C., Southeastern Forest Experiment Station. 8p. 1967. Ref., photos. (U.S. Forest Service. Research Note SE-79).

Sampling techniques for estimating use on Forest Service recreation sites are described. Several methods have been recommended for general use. Other sampling models are in various stages of development and testing.

71648 James, G.A., Harper, R.A. How much and what kind? FLA. WILDL. 21(2):18-19, July 1967. Photos.

A close look is taken of the methods and results of a recreation use survey at Ocala National Forest, Florida.

71649 Knetsch, J.L. A DESIGN FOR ASSESSING OUTDOOR RECREATION DEMANDS IN CANADA. Washington, D.C. 34p. 1967. Illus.

Canada needs better understanding and measurement of its outdoor recreation demands for several reasons: to guide investment and management planning; to identify and evaluate policy choices; and to forecast recreation resources use as it relates to the consideration of alternative development proposals. The design prepared for the National and Historic Parks Branch of the Dept. of Indian Affairs and Northern Development provides step-by-step instructions and recommendations. Household surveys, park user surveys, and supply inventories would provide data. The information would be analyzed to assess demands and needs and to formulate the planning and policy implications. Because recreation demand responds to changes in the population and in the recreation opportunities and facilities offered to that population, these studies should be structured for a continuing process of demand assessment. The procedure is explained, and costs are considered. Results of these proposed demand studies may be applied directly to outdoor recreation program planning at the several levels of government in Canada.

71650 Long, B.L. National Cataloging Center for Water Resources Research. AMER. WAT. WORKS ASS. J. 59(8):930-934, Aug. 1967.

At present there are approximately 6,000 water research projects in the

United States. The establishment in 1964 of the National Cataloging Center for Water Resources Research as a component of the Science Information Exchange, Smithsonian Institution, is meant to eliminate duplication and inefficiency of research. The information on current projects includes supporting agencies, names of investigators, location of work, period of operation, project title and a summary of research.

71651 Michigan. State University, East Lansing. Dept. of Resource Development. PARK AND RECREATION BIBLIOGRAPHY. STAFF PAPERS AND PUBLICATIONS, 1960-1967. East Lansing. 14p. 1967. (Michigan. State University. Cooperative Extension Service. Extension Bulletin 603).

This bibliography lists all works pertaining to parks and recreation of the faculty of the Dept. of Resource Development, M.S.U., alphabetically by author with degrees and academic rank for each. Availability and prices of the publications are provided. A list of M.S. theses related to recreation for the 1960-1967 period is also included.

71652 Munro, N., comp., Anderson, D.M., comp. AN INITIAL BIBLIOGRAPHY ON OUTDOOR RECREATIONAL STUDIES IN CANADA WITH SELECTED UNITED STATES REFERENCES. Ottawa, Ont. Dept. of Forestry and Rural Development. 121p. 1967.

The focus of this bibliography has been on Canadian studies in outdoor recreation research from World War II to 1967. In addition to 75 pages of Canadian references, the bibliography includes 46 pages of American references on outdoor recreation studies. Arrangement of material is by 14 broad subject fields or categories. Although some studies by their nature could be listed under more than one category, they are classed according to the primary theme and are listed only once.

71653 Newby, F.L. Man-nature-beauty: a research dilemma. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):227-238, 1967. Ref.

There has been a growing concern for a definition of such values as natural beauty, aesthetic response, and the outdoor recreation experience which, whether consciously defined or not, are influencing natural resource management decisions to a growing extent. The author discusses attitudes, perceptions, values and beliefs, the need for objective and subjective measurements, "perceptual man" and "man in motion." From increasing participation in potential aesthetic experiences it is evident that land managers will and do need more information concerning the concepts of man, nature and beauty, i.e., – how does man relate to his environment, what does he relate to, and what can be done to make the man-nature relationship more meaningful.

71654 Pollack, M.L. Sports-fitness school for boys. JOHPER, 38(7):40-41, Sept. 1967. Photos.

Thomas K. Cureton established a sports-fitness school at the University of Illinois in 1950 for research in physical fitness and child development. Sports-oriented programs for boys from 7 to 14 years of age resulted in reduction of fat and improvement of cardiovascular fitness. Summary highlights of important findings of results from participation in the program are enumerated.

71655 Poulson, T.L. Research in the Flint Ridge Cave system of Mammoth Cave National Park. CAVES KARST. 9(6):49, Nov.-Dec. 1967.

The ecosystems of the national parks and monuments should be left undisturbed because they offer a unique opportunity for basic research in ecology and evaluating manipulations of the environment. In this abstract, the author, associated with the Cave Research Foundation and Yale University, reports on some biological and geological research in Mammoth Cave National Park.

71656 Rarick, G.L. Present and future research. JOHPER, 38(9):37, Nov.-Dec. 1967.

Professor Rarick, Dept. of Physical Education, University of Wisconsin's School of Education, discusses present status of research on role of physical activity in maintaining dynamic health. In the past, motivational behavior of individual participants has not been explored. More research is recommended in the study of physical activity and its effect on the tensions and psychological stresses of man.

71657 Salter, L.A., Jr. A CRITICAL REVIEW OF RESEARCH IN LAND ECONOMICS. Madison, Univ. of Wisconsin Press. 258p. 1967. Ref.

This book, a critical analysis of research in the rural aspects of land economics in the United States, is concerned with development of a scientific methodology in the social science of land economics. Approximately 500 separate research reports are reviewed in an attempt to provide as complete a test as possible from past research experience. Of these, about 125 research studies are analyzed separately; the analysis extends over a 40-year period and covers every part of the country and the whole range of problems which arise from major changes in the use or holding of farm land. Recreational studies deal with the transformation process of land utilization in rural areas. There is a critical review of research bulletins issued by Experiment Stations of the Department of Agriculture. Research should be viewed in terms of its relevance to action. The functional use of hypotheses should be emphasized. The studies of recreational developments have been concerned with existing recreational units rather than with the transformation process from other uses. HD110 S3 1967

71658 Street, D.R. RECREATION ECONOMICS—FEE FISHING IN PENNSYLVANIA. University Park, Pa., Pennsylvania State University. 10p. 1967. Ref., tables. (Pa. State Univ., Dept. of Agr. and Rural Sociology. AE & RS No. 62).

The Assistant Professor of Economics at Auburn University, Alabama, conducted a study on income received from fee fishing lakes in Pennsylvania. Interviews held with 119 operators in 1962 revealed the following: (1) the small demand for fee fishing services; (2) an overcapacity of fee fishing lakes; (3) low profits, and to some operators, severe losses; (4)

special circumstances are necessary for successful fee fishing lakes. These circumstances have not been considered in this analysis.

71659 Taylor, C.O., Carroll, B. Methods and techniques, Norris Reservoir Sport Fishing Survey, 1963. In Southeastern Association of Game and Fish Commissioners. PROCEEDINGS, 18th Annual Conference, 1964. Columbia, S.C. p.247-255, 1967. Ref., map, illus., tables.

The Tennessee Valley Authority and the Tennessee Game and Fish Commission conducted a one-year survey of sport fishing at Norris Reservoir. The objectives of this survey were to obtain creel census information, economic data, and estimates of total fishing pressure. This report described the census design and methods developed with the help of the Institute of Statistics at North Carolina State University. SK351 S7 1964

71660 Ungar, A. TRAFFIC ATTRACTION OF RURAL OUTDOOR RECREATIONAL AREAS. Washington, Highway Research Board. 28p. 1967. Ref., maps, illus., tables. (National Cooperative Highway Research Program. Report 44).

This report identifies and describes the determining factors of attraction, the characteristics and locations of the recreation areas, and demographic and socioeconomic variables. The results of this survey should enable rational planning of highway access and parking facilities by those concerned with the traffic patterns for rural outdoor recreation areas.

71661 U.S. Congress. House. Committee on Science and Astronautics. THE ADEQUACY OF TECHNOLOGY FOR POLLUTION ABATEMENT. REPORT OF THE RESEARCH MANAGEMENT ADVISORY PANEL. Washington, Govt. Print. Off. 17p. 1966. (89th Congress, 2nd sess. Serial Q).

The report discusses the value of science and technology for pollution control and the need for future research and development in the public and private sector. Some aspects of Federal policy which affect industrial research and development for pollution abatement are described as: (1) tax incentives; (2) government purchase and underwriting of research and development. TD180 U52

71662 U.S. Congress. Senate Committee on Government Operations. NATIONAL FOUNDATION FOR SOCIAL SCIENCES. PART 2. Hearings. Washington, Govt. Print. Off. 497p. 1967. (90th Congress, 1st sess.)

Testimony on the Senate bill to provide for the establishment of a National Foundation for the Social Sciences to promote research and scholarship in these sciences is presented. Some 50 representatives from various disciplines within the social science community appeared to submit statements. Two viewpoints emerged: 1) in support of a new and separate foundation for the social sciences; and 2) for a unified foundation of the natural sciences, the humanities and the social sciences. Also discussed are ways in which to achieve a productive partnership between existing Federal agencies and a foundation where basic social science and applied research programs can be conducted and expanded. K38 G7 90:1 A pt.2

71663 Wagar, J.A. Simulated trampling as a technique in recreation research. In: International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):239-245, 1967.

Four studies of ground cover vegetation have been established in Michigan and Utah using a tamp or roller to simulate trampling on small plots. Because simulated trampling of small plots seems applicable to a wide range of situations, it may become an effective research tool.

71664 Yentsch, A.E., and others. MARINE AND ESTUARINE ENVIRONMENTS, ORGANISMS, AND GEOLOGY OF THE CAPE COD REGION. AN INDEXED BIBLIOGRAPHY, 1665-1965. Woods Hole, Massachusetts, Marine Biological Laboratory. 178p. 1966. Ref., maps, illus., photos.

The Woods Hole Marine Biological Laboratory has long been a center of scientific study about the Cape Cod region. The present bibliography deals with the marine and estuarine environments, organisms, and geology of the Cape Cod region from 1665 to 1965. An introductory section reviews the region, its history, and the scientific work of the Woods Hole Marine Laboratory from the writings of early and contemporary authors. The in-depth subject index, including scientific names, also provides the approximate date of each document and its authors. The marine life of the Woods Hole region is more accurately and fully known than that of any other similar region on the western shore of the Atlantic. Z7994 M33 Y4

71665 Baer, R.A., Jr. Conservation problems more human than technological. CONSERV. CAT. 2(1):4-5, July 1967.

Although ancient polytheistic man was a worshipper of nature and based his self-understanding on a number of nature myths, with the rise of the Judeo-Christian tradition man accepted the belief of one God, eternal and transcendent, who created nature and man with the commission to rule nature and subdue it. As a result of this traditional belief, modern man has treated nature arrogantly, exploiting it for his own purposes. As long as mankind had little technological expertise, he could not modify the natural environment on a large scale. With present technological capabilities and an attitude of dominance over nature by man, the survival of life and beauty on the earth are threatened. The Church must become involved in the conservation battle by educating its members about the social, economic, technological and political facts of conservation, with interpretation in the light of the Gospel.

71666 Baldwin, D.N. "Wilderness: Concept and challenge". COLO. MAG. 44(3):224-240, Summer 1967. Ref., photos.

The origin and initial applications of the wilderness concept are discussed. The thoughts and ideas advanced by Arthur H. Carhart, a recreation engineer in the Forest Service's Rocky Mountain region immediately following World War II, are credited with starting the wilderness movement. Specific reference is made to historical evidence to substantiate the author's point of view.

71667 Christensen, E. The value of a wilderness. FLA. NATUR. 40(3):74-76, 111, July 1967. Photos.

Aesthetic, educational, recreational and research values are some of the immeasurable qualities which merit the conservation of wilderness areas. Specific examples of several of these values are cited from the natural environment of the Everglades National Park.

71668 Cross. L.D. Mountaineering by quotation. APPALACHIA, 36(3):475-480, June 15, 1967.

The author, an expert on mountaineering literature, gives numerous quotations from writers who have felt the beauty of the mountains in order to stimulate non-climbers to enjoy the heritage of the slopes.

71669 DuBois, E. How AWA began. AMER. WHITE WAT. 13(2):3-5, Autumn 1967.

The American White Water Affiliation started in 1954 through the combined efforts of Eliot DuBois and Bob McNair. Originally, AWA was an information exchange between clubs. In 1955 it started publication of the American White Water Journal with articles on rivers, equipment, safety, slalom, techniques and conservation. Suggestions for future improvement of the AWA and its journal include: (1) well written articles on recent technical information; (2) articles on boat handling, boat design, and slalom course design.

71670 Eyama, M. Ethics between man and nature. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):401-405, 1967.

A new code of ethics between man and nature must be established. Since all living creatures have the right of survival, man's conduct toward nature should preclude hunting or fishing for enjoyment and recreation. All problems about forest recreation and wildlife preservation must start from the fundamental concept of man and nature in harmony.

71671 Folsom, M. MORE GREAT AMERICAN MANSIONS AND THEIR STORIES. New York, Hastings House. 276p. 1967. Photos.

The book presents the architecture and history of great mansions in the U.S. Mansions were chosen which represent the image of a person or family of interest with the imagination, the fortitude, the audacity, and the money to build. E159 F66

71672 Goodale, T.L. The fallacy of our programs. PARKS RECREAT. 2(11):39-40, 48-49, Nov. 1967.

Present recreation programs are only treating the symptoms of the problem, constructive and creative use of leisure time. It is paradoxical that those best prepared to use leisure creatively have the least leisure available while those least prepared have the most leisure time. The recreation profession must change its philosophy and introduce the nation to a new value system which places humanity before expediency. Programs should provide opportunities for dignity in addition to mere activity.

71673 Imsland, D.O. Man's care of the earth: A religious perspective. CONSERV. VOLUNT. 30(176):38-42, Nov.-Dec. 1967. Illus.

The need for a meaningful expression between religion and ecology is manifest in an advancing technology and its adverse effects on environmental quality.

71674 James, G.A., Taylor, G.D. Recreation use estimation in the United States and Canada. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):14-29, 1967. Ref.

The problem of developing an accurate, complete picture of current conditions, involving knowledge about the forest user and the amount and kind of pressures the lands and waters are receiving is dealt with in this paper. Some recent Canadian and U.S. studies using sampling techniques are reviewed. The problem of sampling in wilderness-type areas is discussed.

71675 Lambert, D. The National Park experience. NAT. PARKS MAG. 41(236):5-8, May 1967. Photos.

Values unique to the National Park experience are discussed. Philosophical approaches to nature observation are described. The psychological and sociological impacts of contact with wildlife and wilderness areas are weighed and evaluated in relation to wilderness and preservation and the human needs in a discussion of what is called the parks-people dilemma.

71676 Merriam, L.C., Jr. Wilderness studies in the northern Rocky Mountains, Montana, United States of America. In International Union of Forestry Research Organizations. PAPERS, 14th Congress. Munich, DVFFA. 7(26):183-199, 1967. Ref., map.

Background information on the concept of wilderness, its philosophy, and previous studies, is outlined. This paper is concerned with studies of three wilderness tracts on Federal lands managed by the Forest Service and the National Park Service in the Northern Rocky Mountains of Montana between 1960 and 1965. Three phases were chosen: (1) economic land use analysis of the Bob Marshall Wilderness; (2) socio-economic and preference studies of wilderness visitors in the Bob Marshall Wilderness, the Mission Mountains Primitive Area, and the wilderness portions of Glacier National Park (1964); (3) study and analysis of the physical differences and wilderness management approaches of these three areas. These studies indicated that wilderness experience involves natural beauty, roadless and undeveloped country, personal achievement, and removal from civilization in the usual urban context. Also, wilderness as a concept is changing with time and includes a diversity of opportunities for different user groups.

71677 Nash, R. WILDERNESS AND THE AMERICAN MIND. New Haven, Yale University Press. 245p. 1967. Ref.

Wilderness was the basic ingredient of American civilization; the subject of this book is the delineation and interpretation of the changing American conception of wilderness. The definition of the term "wilderness" is subjective and, therefore, varies. The connotation of wilderness in the Old World from which the American colonists came is explored. American's unfavorable attitude toward wilderness began when destruction was used to explore the country. The early settlers saw the wilderness as standing in the way of establishing a civilization. Appreciation of the wilderness began with literary men in the cities of the late eighteenth and early nineteenth centuries; there was a new association of God with nature, which was part of the European Romantic Era. A few frontiersmen, such as Daniel Boone, expressed appreciation of the aesthetics of nature. In this period American art and literature was preoccupied with the landscape. Thoreau and the transcendentalists were concerned with the relationship between nature, man and civilization. Awareness of the gradual loss of wilderness preceded the first calls for its protection. In the last half of the nineteenth century the Federal Government responded and set aside large areas such as Yellowstone for preservation. New York State followed with the establishment of the Forest Preserve in the Adirondacks. John Muir became the country's much needed champion of conservation. Americans felt the effects of over-civilization and the desire to return to the natural state spurred a wilderness cult. The conservation efforts of Aldo Leopold and Robert Marshall are discussed. Today the national attitude toward wilderness is ambivalent. Preservationists realize that wilderness values are fragile and cannot withstand heavy recreation use. E169.1 N37

71678 Nold, J. N. Conservation and social problems. TRAIL TIMBERL. (583):136-141, July 1967.

Conservation in terms of man's use of the wilderness and its significance for the enjoyment and quality of life are discussed. Values of the natural environment as they are experienced amidst today's tensions and social problems are presented.

71679 Pimlott, D.H. Wilderness values in the twentieth century – Wilderness – a panel discussion. In: Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario, p.91-94, 1967.

Wilderness has never been very clearly defined. The most commonly accepted concept is that it is a relatively large area of land. The attitude toward the concept of wilderness preservation in Canada has been very negative. The author concludes by offering suggestions for the satisfaction of wilderness demands, needs and values in Ontario.

71680 Sharp, T. The golden decade. SOARING. 31(5):10-13, May 1967. Photos.

This is a detailed history of the Soaring Society of America from 1957, with a description of key personalities of the organization, financial contributions, and sailplane contributors.

71681 Shepard, P. MAN IN THE LANDSCAPE. A HISTORIC VIEW OF THE ESTHETICS OF NATURE. New York, A.A. Knopf. 297p. 1967. Ref., photos. BH30 N3 S4

71682 Silver, N. LOST NEW YORK. New York, Houghton Mifflin. 242p. 1967. Photos.

The book was prepared to impress upon the citizens of New York City the need for architectural preservation at a time when some first-rate architecture was being razed to make way for the new. An exhibit was planned at the Columbia University School of Architecture. Photographs of old New York buildings from archives and picture collections were assembled and identified. As the exhibit evolved, it was apparent that other aspects of the city's past should be depicted – the old places of recreation, the working districts, the tenement neighborhoods, transportation systems, churches, and the parks. The last section of the book contains pictures with descriptive text of existing landmarks in danger of destruction. Public improvement, private investment and development of city sub-centers are encouraged to enhance architectural conservation of time honored places and the continuity of the urban environment. F128.37 S55

71683 Slusher, H.S. MAN, SPORT, AND EXISTENCE: A CRITICAL ANALYSIS. Philadelphia, Lea & Febiger. 243p. 1967. Ref.

The author represents an existential position in his analysis of the total concept and spirit of sport in its present form and the state of being of the athlete while in participation in American sports today. The potentiality of sports in the development of a meaningful humanity through individual participation is the theme. GV706 S58

71684 Swinton, W.E. Introduction to wilderness – a panel discussion. In Conference on Parks and Outdoor Recreation, Toronto, 1967. PROCEEDINGS. Toronto, Conservation Council of Ontario. p.89-90, 1967.

The present era is on the threshold of a new understanding of wilderness, its significance for civilization and the survival of man.

71685 Thompson, R.C. Preservation, recreation, and the premise of forestry. J. FOREST. 65(6): 372-377, June 1967. Photos.

After a discussion of ancient and modern philosophies concerning the natural environment vs. the human society, the article suggests the need for a new professional orientation for the forester. There is need for men to manage natural resources. To perform these tasks competently they should be trained in the social, economic, and political disciplines and also have a good background in mathematics. They do not have to be biologists although there should be an appreciation for biology and an understanding of various aspects of forest ecosystems. The bases of professionalism must be rooted in the understanding of the fundamentals of ecology. Forestry as a profession has not captured public confidence since it has been associated with commercialism rather than science.

71686 Wheelwright, T. ALONG THE MAINE COAST. Barre, Mass., Barre Publishers. 131p. 1967. Photos.

This book is a historical, descriptive, aesthetic, and photographical essay of points along the Maine coast. Examples of architecture, historical spots, and harbors are given. F20 K57

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Alabama Conservation. Montgomery, Alabama Department of Conservation. Free.

Alaska Sportsman. Juneau, Alaska, Northwest Publishing Co. $5.00

Amateur Athlete. Lynn, Massachusetts, Amateur Athlete Union. $5.00

American Bar Association Journal. Chicago, Illinois, American Bar Association. $2.50

American City. New York, N.Y., Buttenheim Publishing Corporation. $7.00

American County Government. Lancaster, Pa., National Association of Counties. $10.00

American Cycling. Oakland, Calif., American Cycling Press. $3.00

American Economic Review. Evanston, Illinois, Northwestern University. $10.00

American Forests. Washington, D.C., American Forestry Association. $6.00

American Highways. Washington, D.C., American Association of State Highway Officials. $2.00

American Horticultural Magazine. Washington, D.C., American Horticultural Society. $6.00

American Institute of Planners. Journal. Baltimore, Maryland, American Institute of Planners. $8.00

American Journal of Economics and Sociology. New York, American Journal of Economics and Sociology, Inc. $5.00

American Rifleman. Washington, D.C., National Rifle Association of America. $5.00

American Water Works Association. Journal. Lancaster, Pennsylvania, American Water Works Association, Inc. $10.00

American White Water. Berkeley, Calif., American White Water Affiliation. $2.50

Amusement Business. Cincinnati, Ohio, Billboard Publishing Co. $12.00

Appalachia. Boston, Massachusetts, Appalachian Mountain Club. $4.00

Appalachian Trailway News. Washington, D.C., Appalachian Trail Conference, Inc. $1.50

Appaloosa News. Moscow, Idaho, Appaloosa Horse Club, Inc. $5.00

Arborists News. Wooster, Ohio, International Shade Tree Conference. Free (members).

Arizona Highways. Phoenix, Arizona Highwy. Dept. $4.00

Arizona Review. Tucson, Ariz., University of Arizona. Free.

Arizona Wildlife Sportsman. Phoenix, Ariz., Lincoln Publishing Co. $3.00

Athletic Journal. Evanston, Illinois, Athletic Journal Publishing Company. $3.00

Note: Underscoring indicates abbreviations.

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Atlantic Monthly. Concord, N.H., Rumford Press. $8.50

Audubon. N.Y., National Audubon Society. $7.00

B

Badger Sportsman. Chilton, Wis., Times-Journal Co. $2.50

Better Camping. Milwaukee, Wis., Kalmbach Publishing Co. $4.00

Bioscience. Washington, D.C. American Institute of Biological Science. $18.00

Bulletin of the Atomic Scientists. Chicago, Ill., Educational Foundation for Nuclear Science. $7.00

C

Camping Guide. N.Y., Rajo Publications, Inc. $3.00

Camping Magazine. Martinsville, Ind., American Camping Association. $6.00

Canadian Field Naturalist. Ottawa, Can., Ottawa Field – Naturalist's Club. $5.00

Canadian Geographer. Toronto, Can., University of Toronto Press. $10.00

Caves Karst. Castro Valley, Calif., Cave Research Associates. $2.50

Colorado Magazine. Denver, Colo., State Historical Society. $5.00

Conservation Catalyst. New York, Belle W. Baruch Foundation. Free.

Conservation News. Washington, D.C., National Wildlife Federation. Free.

C (continued)

Conservation Volunteer. St. Paul, Minnesota Conservation Department. Free.

Conservationist. Albany, N.Y., New York State Conservation Department. $2.00

D

Desert. Palm Desert, Calif., Desert Magazine. $5.00

Down East. Camden, Maine, Down East Magazine. $4.75

E

Explorers Journal. N.Y., Explorers Club. $6.00

F

Field and Stream. N.Y., Holt, Rinehart and Winston, Inc. $4.00

Fishing World. Floral Park, N.Y., Allsport Publishing Corp. $4.00

Florida Naturalist. Maitland, Fla., Audubon Society. $5.00

Florida Wildlife. Tallahassee, Fla., Game and Fresh Water Fish Commission. $2.50

Ford Times. Dearborn, Mich., Ford Motor Company. Free.

Forest Farmer. Atlanta, Ga., Forest Farmers Association. $6.00

G

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Motor News. Lansing, Automobile Club of Michigan. $2.00

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National Fisherman. Belfast, Maine, Journal Publishing Co. $4.00

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Saturday Review. New York, Saturday Review, Inc. $8.00

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